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Revision and Phylogenetic Analysis of the Genus Melaneros Fairmaire, 1877 (Coleoptera, Lycidae) from New Guinea

by M. Bocáková

Abstract. This paper deals with New Guinean species of the genus *Melaneros*. The genus *Graciloplateros* Pic, 1921 is made a junior synonym of *Melaneros* Fairmaire, 1877. *Graciloplateros guineensis* Pic, 1921 is transferred to the genus *Melaneros* Fairmaire and *Plateros bicolor* Kleine, 1939 is synonymized to *Melaneros guineensis* (Pic, 1921). Totally 57 species of the genus *Melaneros* from New Guinea have been recognized 55 of them are new to science. Species have been clustered into 12 species groups.

Computer analysis by Hennig 86 was used to reconstruct phylogenetic relationships and to propose a cladogram of these species groups. Descriptions and illustrations of important diagnostic features are given.

Key words: Coleoptera, Lycidae, *Melaneros*, New Guinea, taxonomic revision, phylogenetic analysis

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Introduction

The genus *Melaneros* is one of the largest genera within the family Lycidae. Although it is widely distributed through all over the world, especially in tropical regions (in Afrotropical region as *Planeteros* Gorham systematic position of which is doubtful), only three *Melaneros* species has been recorded from New Guinea so far.

The first New Guinean species which are now placed in *Melaneros* were *Plateros humbolti* Pic, 1921, and *Graciloplateros guineensis* Pic, 1923. KLEINE (1939) introduced one additional species – *Plateros bicolor*. In spite of the fact that this paper brings descriptions of many new *Melaneros* species these small animals seem to be relatively rare in New Guinea comparing with other genera of the family Lycidae. They have only constituted about 2% of specimens of Lycidae within the studied material from New Guinea while from Oriental region they usually form around 30% of collected Lycidae. The poor fauna of the genus *Melaneros* in this region corresponds with the fact that New Guinea is situated nearly on the southern border of *Melaneros* distribution (some *Melaneros* were recorded from Fidji and Samoa and one species even from eastern Australia).

This paper is based on a large material gathered by Bernice P. Bishop Museum Honolulu (U.S.A.) in 1960–1970s and also on some latest materials from other museums, namely the Museum of Natural History in Basel (NHMB), Hungarian National Museum Budapest (HMB) and the State Museum of Natural History in Stuttgart (SMNS).

The genus *Melaneros* sensu Bocák & Bocáková (1992) comprises mostly black and yellow coloured species which show extensive variability of external characters. Moreover, the female genitalia seem to be only slightly diversified. These are two reasons which make the identification of females very difficult or often impossible. Therefore this paper is mostly based on the study of copulathory organs of males which are strongly diversified and sufficiently stable within species. Other important diagnostic features are the shape of pronotum and basal antennal segments as well as the size of the eyes.

The genus *Melaneros* seems to be closely related to some other genera of the tribe Platerodini. One of the most important problems is the questionable position of the genus *Ditoneces* Waterhouse which only differs from *Melaneros* in having serrate to flabellate antennae in males and there is no apparent gap in the variability range of this character. Therefore, in this paper species with flabellate antennae are included in the genus *Melaneros*.

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They are: Dr. S.A. Samuelson, Bernice P. Bishop Museum Honolulu, U.S.A. (BMH), Mr. J. Sedlacek, Brookfield, Australia (JS), Dr. M. Brancucci – Naturhistorisches Museum Basel, Switzerland (NHMB), Dr. O. Merkl – Hungarian National Museum Budapest (HMB), Dr. W. Schawaller – Staatliches Museum für Naturkunde, Stuttgart (SMNS), Dr. J. Ménier – Muséum d'Histoire naturelle Paris (MP) and Mrs. E. R. Peacock – British Museum of Natural History, London (BM).

Other used abbreviations: LMB – author's collection.

Phylogenetics

Following synapomorphies supporting monophyly of the genus *Melaneros* have been found: antennal segment 3 conspicuously longer than 2 (x *Dihammatus* Waterhouse), pronotum without carinae, elytra with inconspicuous reticulate cells, male genitalia without paramerae, phallobase small, never annuliform (x *Lyponia*). The sister group of *Melaneros* is not known and therefore the out-group comparison was used for *Melaneros*.

A hypothetical ancestor with all characters coded as plesiomorphic (state 0) was used for computer analysis. It was not necessary to weight characters for the Hennig 86 reconstruction.

Polarity of characters was determined using both out-group and in-group criteria. In-group is defined as members of *Melaneros*, out-group as other Lycidae with an emphasis on the tribe Platerodini.

Characters

Although species within *Melaneros* are easily distinguishable, finding of synapomorphies was very difficult because of following reasons: species are too variable in external characters and generally it is not possible to assign females to males. Therefore mostly only male genital characters could be used. A data set of 15 characters was compiled for 12 distinguished species groups.

Character 1: Antennal segment 3, length: 0 - short (segment 4 is at least 1.5 times longer than 3, Figs 151–156, 208); $1 - \log$ (segment 4 is at most 1.2 times longer than 3).

Melaneros generally have long antennal segment 3 (nearly as long as 4) which is considered to be apomorphic. Short antennal segment



Figs 1–14: Male genitalia of holotypes in ventral and lateral views: 1–2, *Melaneros sed-laceki* n.sp. 3–4, *M. flavofasciatus* n.sp. 5–6, *M. serratus* n.sp. 7–8, *M. quateorum* n.sp. 11–12, *M. baloghi* n.sp. 13–14, *M. infusus* n.sp. 9–10, paratype of *M. sedlaceki* n.sp., black form. Scale = 0.5 mm. Abbreviations: vtc = ventrolateral compression, dar = dorsoapical ridges).

3 occurs besides M. sedlaceki – group also in the related genus (*Dihammatus*) bearing some other plesiomorphic features and that is why it is considered to be plesiomorphic. Basis for polarity: out-group comparison.

Character 2: Apex of phallus: 0 - not ventrolaterally compressed; 1 - laterally compressed ventrally, with slot-formed opening - (Figs 1–12, 204, 205).



Figs 15–25: Male genitalia of holotypes in ventral and lateral views: 15–16, *Melaneros maai* n.sp. 17, *M. sentus* n.sp. 18, *M. praecipuus* n.sp. 19–20, *M. inclinatus* n.sp. 21–22, *M. cornutus* n.sp. 23, *M. proprius* n.sp. 24–25, *M. flavohumeralis* n.sp. Scale = 0.5 mm. Abbreviations: vlp = ventrolateral projection, scp = apical portion of phallus semicircularly arched.

Only *M. sedlaceki* group have ventrally compressed apex of phallus with a slot-formed orifice, which is considered to be a synapomorphy of this group. Basis for polarity: out-group and in-group comparison.

Character 3: Two dorsoapical longitudinal ridges of phallus: 0 – missing; 1 – present (Figs 2, 3, 6, 8, 10, 12, 66, 205).

Among *Melaneros* in general dorsoapical portion of aedeagus is simple. Therefore the presence of dorsoapical ridges is considered to be



Figs 26–39: Male genitalia of holotypes in ventral and lateral views: 26–27, *Melaneros cordatus* n.sp. 28–29, *M. clissoldi* n.sp. 30–31, *M. gravis* n.sp. 32–33, *M. dilatatus* n.sp. 34–35, *M. imbricatus* n.sp. 36–37, *M. perticatus* n.sp. 38–39, *M. inflexus* n.sp. Scale = 0.5 mm. Abbreviations: os = orificial sclerite, ved = ventral emargination and a dent.

apomorphic. It is a synapomorphy for *M. sedlaceki* group shared with *M. admirabilis* n. sp. Basis for polarity: out-group and in-group comparison.

Character 4: Aedeagus, two hooked ventrolateral projections: O – missing; 1 – present (Figs 16,17, 18, 19, 21, 23, 25, 203).

Primitively phallus does not possess any projections.

Such paired projections have been found only in M. sentus and M. cornutus groups. Therefore it is considered to be their sha-



Figs 40–53: Male genitalia of holotypes in ventral and lateral views: 40, *Melaneros turritus* n.sp. 41–42, *M. rigidus* n.sp. 43–44, *M. usitatus* n.sp. 45–46, *M. semiapertus* n.sp. 47–48, *M. spinosus* n.sp. 49–50, *M. dimidiatus* n.sp. 51, *M. supinus* n.sp. 52, *M. uncinatus* n.sp. 53, *M. languidulus* n.sp. Scale = 0.5 mm. Abbreviations: ved = ventral emargination and a dent).

red synapomorhy. Basis for polarity: out-group and in-group comparison.

Character 5: Orificial sclerite: 0 - missing; 1 - weakly sclerotized (Figs 26–39, 50), 2 - strongly sclerotized (Fig. 48).

Within *Melaneros* species generally do not have orificial sclerites. These sclerites are present only in *M. cordatus* group and that is why it is considered to be a synapomorphy of this group. Basis for polarity: out-group and in-group comparison.

Character 6: Apical portion of phallus: 0 - not dorsoventrally flattened; 1 - dorsoventrally flattened (Figs 26–50).

Among other Lycidae phallus is usually circular in cross – section or laterally compressed. Therefore dorsoventrally flattened apical portion of phallus is considered to be a shared synapomorphy for M. cordatus and M. turritus species groups. Basis for polarity: out-group and in-group comparison.

Character 7: Apical portion of phallus: 0 - with a ventroapical opening (Figs 1–18, 24, 25, 32–39, 50, 66, 203–205); 1 – orifice weakly moved proximally (Figs 19–23, 26–31, 40–48, 51, 52, 206); 2 – apical quarter of phallus staff formed (Figs 55–63, 68–98), orifice in median portion; 3 – apical 2/3 of phallus staff formed, orifice moved basally (Figs 90, 202).

In most Lycidae as well as in taxa bearing mostly primitive characters the orifice of phallus is situated apically. Therefore I consider this state plesiomorphic and proximally moved orifice to be apomorphic. The most derived state of this character has been found in the *M. pallescens* group. In some species of the *M. cordatus* group a ventroapical opening (state 0) has been found in others a weakly moved orifice (state 1). Basis for polarity: out-group and in-group comparison.

Character 8: Aedeagus: 0 – without a dent; 1 – with a lateral dent medially (Figs 70–86, 91, 92).

Among *Melaneros* and other Lycidae male genitalia mostly do not possess dents. If dents are present they are situated in different portions of the phallus. Therefore the presence of a mediolateral dent is considered to be a synapomorphy of *M. guineensis* group. Basis for polarity: out-group and in-group comparison.

Character 9: Aedeagus: 0 – not disjointed medially; 1 – disjointed into two belts medially and fused distally (Fig. 207).

Most of *Melaneros* as well as other Lycidae have the phallus simply formed. That is why a medially disjointed phallus which is present in *M. riedeli* n. sp. is considered to be apomorphic.

Basis for polarity: out-group and in-group comparison.

Character 10: Flattened ventrobasal lobe of phallus: 0 – missing, 1 – present (Figs 90, 202).

Only male genitalia of the *M. pallescens* group possess a flat ventral lobe of phallus in the basal half and so it is clearly a synapomor-



Figs 54–69: Male genitalia of holotypes in ventral and lateral views: 54–55, *Melaneros aduncus* n.sp. 56–57, *M. samuelsoni* n.sp. 58–59, *M. wauensis* n.sp. 60–61, *M. deflectus* n.sp. 62–63, *M. falcatus* n.sp. 64–65, *M. excelsus* n.sp. 66–67, *M. admirabilis* n.sp. 68–69, *M. simbaiensis* n.sp. Scale = 0.5 mm. Abbreviations: vmb = ventromedial belts, dar = dorsoapical ridges).

phy of this group. Basis for polarity: out-group and in-group comparison.

Chartacter 11: Two ventromedial belts of aedeagus: 0 - missing; 1 - present (Figs 59, 60, 63, 69).

Most *Melaneros* and other Lycidae do not possess such structures. Therefore the presence of these ventromedial belts is considered to be a synapomorphy of *M. wauensis* group. Basis for polarity: out-group and in-group comparison.



Figs 70–82: 70–71, Male genitalia of Melaneros guineensis (Pic). 72–82, Male genitalia of holotypes in ventral and lateral views: 72–73, M. sollemnitex n.sp. 74, M. chimbuensis n.sp. 75–76, M. decoctus n.sp. 77–78, M. nigronotatus n.sp. 79–80, M. prominens n.sp. 81-82, M. consuetus n.sp. Scale = 0.5 mm. Abbreviations: Id = lateral dent.

Character 12: The distal portion of phallus: 0 - simply weakly arched; 1 - strongly hooked dorsally (Figs 51, 52).

Most *Melaneros* have the phallus gradually arched (ventrally or dorsally). The strongly dorsally hooked apex of phallus is therefore considered to be a synapomorphy of *M. supinus* group.

Also *M. callimorpha* (Kln.) and *M. reflexus* (Boc. et Boc.) from Sri Lanka seem to belong to this species group. Basis for polarity: out-group and in-group comparison.



Figs 83–98: Male genitalia of holotypes in ventral and lateral views: 83–84, *Melaneros brandti* n.sp. 85–86, *M. bulolensis* n.sp. 87–88, *M. filum* n.sp. 89–90, *M. pallescens* n.sp. 91–92, *M. montanus* n.sp. 93–94, *M. tenuissimus* n.sp. 95–96, *M. gressitti* n.sp. 97–98, *M. simplex* n.sp. Scale = 0.5 mm. Abbreviations: vbl – ventrobasal lobe, ld – lateral dent.

Character 13: Phallus: 0 - not semicircularly arched dorsolaterally; 1 - semicircularly arched dorsolaterally (Figs 15–25).

Among *Melaneros* the phallus is mostly elongate. In *M. sentus* and *M. cornutus* groups the phallus is semicircularly dorsolaterally arched, which is considered to be their synapomorphy shared also with M. admirabilis n. sp. Basis for polarity: out-group and in-group comparison.

Character 14: Paramerae: 0 – present; 1 – absent.

Among Lycidae a general tendency to shortened or missing paramerae was found. Besides Platerodini paramerae were shortened to lost independently, in



Figs 99–105: Head and pronotum of holotypes: 99, *Melaneros sedlaceki* n.sp. 100, *M. flavofasciatus* n.sp. 101, *M. serratus* n.sp. 102, *M. infusus* n.sp. 103, *M. baloghi* n.sp. 104, *M. quateorum* n.sp. 105, *M. sedlaceki* n.sp., paratype. Scale = 0.5 mm.

parallel also in all other Lycidae lineages except Calochrominae. Missing paramerae is a synapomorphy of *Melaneros* shared with some other genera of the tribe Platerodini. Basis for polarity: out-group comparison.

Character 15: Ventral side of phallus: 0 - simple; 1 - emarginate in the begining of apical orifice with a small dent at this point (lateral view, Figs 27–39, 45–52).

Among Melaneros ventral margin of phallus is usually simple.

An emarginate phallus at the begining of apical orifice is therefore considered to be a shared synapomorphy of *M. cordatus* and *M. supi*-



Figs 106–113: Head and pronotum of holotypes: 106, *Melaneros maai* n.sp. 107, *M. sentus* n.sp. 108, *M. praecipuus* n.sp. 109, *M. inclinatus* n.sp. 110, *M. cornutus* n.sp. 111, *M. proprius* n.sp. 112, *M. flavohumeralis* n.sp. 113, *M. cordatus* n.sp. Scale = 0.5 mm.

nus groups as well as *M. semiapertus* n. sp. from *M. turritus* group. Basis for polarity: out-group and in-group comparison.

Data matrix:

character number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ancestor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. sedlaceki gr.	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0
M. admirabilis n.sp.	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0
M. sentus gr.	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0
M. cornutus gr.	1	0	0	1	0	0	1	0	0	0	0	0	1	1	0
M. riedeli gr.	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0
M. samuelsoni gr.	1	0	0	0	0	0	2	0	0	0	0	0	0	1	0
M. wauensis gr.	1	0	0	0	0	0	2	0	0	0	1	0	0	1	0
M. guineensis gr.	1	0	0	0	0	0	2	1	0	0	0	0	0	1	0
M. pallescens gr.	1	0	0	0	0	0	3	0	0	1	0	0	0	1	0
M. supinus gr.	-	0	0	0	0	0	1	0	0	0	0	1	0	1	1
M. turritus gr.	1	0	0	0	0	1	1	0	0	0	0	0	0	1	-
M. cordatus gr.	1	0	0	0	1	1	-	0	0	0	0	0	0	1	1
M. spinosus n.sp.	1	0	0	0	2	1	1	0	0	0	0	0	0	1	1

Phylogenetic analysis

As a result of the Hennig 86 analysis there was a single most parsimonious tree (Fig. 216). There were 20 steps, with a consistency index (CI) of 90%. The data matrix was also run using successive weighting (Farris, J., 1988), resulting in the same tree topology, with 164 steps and rather higher CI of 96%.

From 12 distinguished species groups it is *M. sedlaceki* group which seems to bear most of the plesiomorphic characters as antennal segment 3 apparently shorter than 4 (char. 1) and pronotum with a shallow median areola although on the other hand this group is well supported by two synapomorphies (phallus ventrolaterally compressed distally bearing two dorsoapical longitudinal ridges.

M. sentus and *cornutus* groups seem to be relatively derived because of having a short phallus provided with two hooked ventrolateral projections (synapomorphy). They have also the phallus semicircularly produced dorsolaterally, which is another synapomorphy shared also with *M. admirabilis* n.sp.. Also *M. cordatus, turritus* and *supinus* groups seem to be relatively derived because of the presence of a ventral

longitudinal opening which can be slot-formed (M. turritus group) or provided with an orificial sclerite (M. cordatus group).

A simply staff-formed distal portion of the phallus is considered to be a synapomorphy for *M. samuelsoni, wauensis, guineensis* and *pallescens* groups relationships of which have not been solved yet.



Figs 114–121: Head and pronotum of holotypes: 114, Melaneros gravis n.sp. 115, M. dilatatus n.sp. 116, M. imbricatus n.sp. 117, M. perticatus n.sp. 118, M. inflexus n.sp. 119, M. turritus n.sp. 120, M. rigidus n.sp. 121, M. usitatus n.sp. Scale = 0.5 mm.



Figs 122–131: Head and pronotum: 122, *Melaneros languidulus* n.sp. paratype. 123, *M. semiapertus* n.sp., holotype. 124, *M. dimidiatus* n.sp., holotype. 125, *M. supinus* n.sp., holotype. 126, *M. uncinatus* n.sp., holotype. 127, *M. spinosus* n.sp., holotype. 128, *M. deflectus* n.sp., paratype. 129, *M. samuelsoni* n.sp., holotype. 130, *M. wauensis* n.sp., holotype. 131, *M. aduncus* n.sp., holotype. Scale = 0.5 mm.

Taxonomy Melaneros Fairmaire, 1877

Melaneros atroviolaceus Fairmaire

Melaneros atroviolaceus Fairmaire, 1877. Petites Nouv. Ent. 2: 173 (type species – designated by Blair (1928), lectotype in MP).
Plateros Bourgeois, 1879, Ann. Soc. Ent. Belg. 22: 19.
Graciloplateros Pic, 1921, Echange, Nr. 404: 1 – n.syn.
Melaneros: Kleine, 1933, Cat. Col., Vol.128: 92.
Plateros: Kleine, 1933: Cat. Col., Vol. 128: 90.
Melaneros: Bocák & Bocáková, 1992, Ent. Basiliensia, 15: 255.

Diagnosis: Antennae filiform to flabellate in males, filiform to weakly serrate in females. Antennal segment 3 long, at most 1.5 times shorter than 4. Pronotum without carinae, sometimes only with folds forming a shallow areola. Elytra with reticulate cells inconspicuous, primary and secondary costae not distinguishable. Male genitalia without paramerae, phallobase small. Spiculum gastrale absent.

Description: Small beetles, length: 3.3–7.6 mm, width at humeri: 0.82–2.0 mm. Body predominantly dark brown or yellow, or various combinations of these colours, sometimes even white. Antennal tubercles inconspicuous, antennae filiform to flabellate. Antennal segment 1 pearformed, 2 small, 3 usually as long as 4, at most 1.5 times shorter than 4. Maxillary palpi 4–segmented, labial palpi 3–segmented. Pronotum without carinae in median portion, sometimes only with folds forming inconspicuous areola or only flat in median portion, but with a tiny areola at basal margin medially. Scutellum square, weakly emarginate distally. Elytra with 9 weakly developed costae, primary and secondary costae indistinguishable. Reticulate cells slightly developed. Spiculum gastrale absent. Male genitalia composed of phallobase and phallus, paramerae absent. Female genitalia with short distally widened "coxites", short valvifers, nearly fused to coxites which are provided with small "styli" distally.

Distribution: Southeastern Russia (Ussuri region), Korea, Japan, Oriental region, whole Indonesia, Papua New Guinea, islands Tonga, Fidji, Samoa, eastern Australia, Africa, North and South Americas.

Key to New Guinean species of Melaneros

1.	Body	dark	brown	to	black,	at mo	ost	marg	gins	of	pronot	um	and	bas	es
	of fer	nora	yellow												2
_	Either	r pror	notum	or p	part of	elytra	ye	ellow							13

- 2. Antennae strongly serrate (Figs 167, 168) 3
- Antennae filiform or slightly serrate 4
- Head with large eyes, eye diameter 1.2 times longer than distance between eyes (Fig. 116), aedeagus with a hooked tooth dorsally in apical portion (Figs 34, 35).
 Melaneros imbricatus n.sp.
- Eyes small, distance between eyes 1.15 times as long as eye diameter (Fig. 117), aedeagus simple (Figs 36,37).
 M. perticatus n.sp.
- 4. Antennae slightly serrate (Fig. 182), eyes small, aedeagus hooked in apical 1/4, pointed at apex (Figs 60, 61).
 M. deflectus n.sp.



Figs 132–141: 132, Head and pronotum of *Melaneros guineensis (Pic). 133–141:* Head and pronotum of holotypes: 133, *M. falcatus* n.sp. 134, *M. excelsus* n.sp. 135, *M. decoctus* n.sp. 136, *M. admirabilis* n.sp. 137, *M. simbaiensis* n.sp. 138, *M. sollemnitex* n.sp. 139, *M. nigronotatus* n.sp. 140, *M. consuetus* n.sp. 141, *M. prominens* n.sp. Scale = 0.5 mm.

M. bulolensis n.sp.

- Aedeagus without teeth 6
- 6. Aedeagus laterally curved in middle portion (Figs 62, 63), eyes large (Fig. 133).
 M. falcatus n.sp.
- Aedeagus different 7



Figs 142–150: Head and pronotum of holotypes: 142, *Melaneros filum* n.sp. 143, *M. pallescens* n.sp. 144, *M. montanus* n.sp. 145, *M. tenuissimus* n.sp. 146, *M. gressitti* n.sp. 147, *M. bulolensis* n.sp. 148, *M. chimbuensis* n.sp. 149, *M. brandti* n.sp. 150, *M. simplex* n.sp. Scale = 0.5 mm.

- Acdeagus simple, like a curved stick (Figs 95, 97) 12
8. Aedeagus of complicated structure (Figs 66, 203, 206) 10
- Aedeagus of simple shape (Figs 7, 9)
9. Eyes very large, eye diameter 1.5 times as long as distance between
eyes (Fig. 104), aedeagus widest in median portion (Figs 7, 8).
M. quateorum n.sp.
- Eyes small, distance between eyes slightly longer than eye diameter
(Fig. 99), aedeagus widest in apical third (Fig. 9).
M. sedlaceki n.sp. (black form).
10. Eyes small, posterior angles of pronotum acute (Fig. 136), aedeagus
of characteristic shape (Fig. 66) M. admirabilis n.sp. (black form).
- Eyes larger, aedeagus different 11
11. Antennae slender, reaching apical 1/4 of elytra, aedeagus with two
hooked projections (Fig. 203). M. ibaiensis n.sp.
- Antennae short reaching elytral half, aedeagus strongly curved api-
cally (Figs 206, 207). M. riedeli n.sp.
12. Lateral margins of pronotum strongly emarginate (Fig. 150), aedea-
gus laterally compressed in apical 2/3 (Figs 97, 98).
M. simplex n.sp.
- Lateral margins of pronotum nearly straight (Fig. 146), aedeagus
slightly compressed dorsoventrally (Figs 95, 96).
slightly compressed dorsoventrally (Figs 95, 96). M. gressitti n.sp.
Slightly compressed dorsoventrally (Figs 95, 96). M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle
slightly compressed dorsoventrally (Figs 95, 96). M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle
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Slightly compressed dorsoventrally (Figs 95, 96). M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle 14 – Pronotum black 32 14. Whole elytra yellow or only slightly infuscate apically 15 – Elytra black to dark brown 18 15. Whole elytra yellow 16 – Elytra infuscate apically 17 16. Large species (7–8 mm), aedeagus with a tooth in middle portion (Figs 91, 92). M. montanus n.sp.
M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle
Slightly compressed dorsoventrally (Figs 95, 96). M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle 14 – Pronotum black 32 14. Whole elytra yellow or only slightly infuscate apically 15 – Elytra black to dark brown 18 15. Whole elytra yellow 16 – Elytra infuscate apically 17 16. Large species (7–8 mm), aedeagus with a tooth in middle portion (Figs 91, 92). M. montanus n.sp. – Smaller species (6 mm), aedeagus with a tooth in basal portion of phallus (Figs 89, 90). M. pallescens n.sp.
M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle
M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle
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Slightly compressed dorsoventrally (Figs 95, 96). M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle
M. gressitti n.sp. M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle
M. gressitti n.sp. M. gressitti n.sp. 13. Pronotum yellow or only weakly infuscate in the middle

- 20. Aedeagus like a stick, sometimes widened in the middle or apical portions (Figs 13, 40, 41, 47, 51, 53, 70, 72) 21



Figs 151–174: Basal antennal segments of holotypes: 151, Melaneros sedlaceki n.sp. 152, M. flavofasciatus n.sp. 153, M. serratus n.sp. 154, M. baloghi n.sp. 155, M. quateorum n.sp. 156, M. sedlaceki n.sp., paratype. 157, M. infusus n.sp. 158, M. inclinatus n.sp. 159, M. maai n.sp. 160, M. sentus n.sp. 161, M. praecipuus n.sp. 162, M. cornutus n.sp. 163, M. proprius n.sp. 164, M. flavohumeralis n.sp. 165, M. cordatus n.sp. 166, M. gravis n.sp. 167, M. imbricatus n.sp. 168, M. perticatus n.sp. 169, M. inflexus n.sp. 170, M. turritus n.sp. 171, M. semiapertus n.sp. 172, M. usitatus n.sp. 173, M. rigidus n.sp. 174, M. dimidiatus n.sp. Scale = 0.5 mm.

- Aedeagus of more complicated structure 28
21. Aedeagus short, with a widened opening in apical portion
(Figs 13, 14). M. infusus n.sp.
- Aedeagus different 22
22. Aedeagus strongly widened in apical portion with an orificial scle-
rite provided with a thorn heading to phallobase (Figs 47, 48).
M. spinosus n.sp.
- Aedeagus without a thorn in apical portion
23. Aedeagus dorsoventrally compressed
- Aedeagus not flattened 25
24. Aedeagus widest in middle portion (Figs 41, 42). M. rigidus n.sp.
- Aedeagus widest in apical portion (Fig. 40). M. turritus n.sp.
25. Aedeagus dorsally hooked in apical portion (Fig. 51), eye diameter
1.3 times longer than distance between eyes M. supinus n.sp.
- Aedeagus different 26
26. Aedeagus staff-formed distally, pointed at apex (Figs 70, 71,
72, 73)
- Aedeagus membraneous in apical portion (Fig. 53), pronotum with
lateral margins emarginate (Fig. 122). M. Janguidulus n.sp.
27. Pronotum with lateral margins nearly straight, aedeagus with phal-
lus strongly widened at base, then strongly laterally asymmetrically
constricted in basal third (Figs 70, 71).
M. guineensis (Pic, 1921).
- Pronotum with lateral margins emarginate (Fig. 138), aedeagus with
a conspicuous tooth in middle portion (Figs 72, 73).
M. sollemnitex n.sp.
28. Pronotum trapezoidal, lateral margins straight, convergent forwards
(Fig. 107), aedeagus with two reversed thorns in apical portion
(Fig. 17). M. sentus n.sp.
– Pronotum with lateral margins either nearly parallel or emarginate
(Figs 106, 108, 110, 111) 29
29. Lateral margins of pronotum emarginate (Figs 106, 111) 30
- Lateral margins of pronotum nearly straight (Figs 108, 110) 31
30. Posterior angles of pronotum strongly produced laterally (Fig. 106),
aedeagus as figured (Figs 15, 16). M. maai n.sp.
- Posterior angles of pronotum slightly produced laterally (Fig. 111),
aedeagus with a hooked emarginate projection in apical third
(Fig. 23). M. proprius n.sp.
31. Eyes large (Fig. 110), aedeagus with short hooked projections in
apical quarter (Figs 21, 22). M. cornutus n.sp.

- Eyes small (Fig. 108), aedeagus with long hooked projections in apical half of phallus (Fig. 18).
 M. praecipuus n.sp.
- 32. Elytra mostly black, with a transverse yellow belt reaching from 3/5 to 6/7 of their length, aedeagus as figured (Figs 3, 4), antennae slightly serrate.
 M. flavofasciatus n.sp.



Figs 175-200: Basal antennal segments: 187, Melaneros guineensis (Pic). 180, M. samuelsoni n.sp., paratype. 175-199 (except 180, 187): holotypes of: 175, M. spinosus n.sp. 176, M. supinus n.sp. 177, M. uncinatus n.sp. 178, M. languidulus n.sp. 179, M. aduncus n.sp. 181, M. wauensis n.sp. 182, M. deflectus n.sp. 183, M. falcatus n.sp. 184, M. excelsus n.sp. 185, M. admirabilis n.sp. 186, M. simbaiensis n.sp. 188, M. sollemnitex n.sp. 189, M. chimbuensis n.sp. 190, M. decoctus n.sp. 191, M. nigronotatus n.sp. 192, M. prominens n.sp. 193, M. consuetus n.sp. 194, M. brandti n.sp. 195, M. bulolensis n.sp. 196, M. filum n.sp. 197, M. pallescens n.sp. 198, M. montanus n.sp. 199, M. tenuissimus n.sp. 200, M. simplex n.sp., paratype. Scale = 0.5 mm.

- Elytra with different colour patterns	3
33. Antennae slightly serrate (Fig. 153), elytra with transverse yellow	V
elipsoid spot in anterior fourth, aedeagus as figured (Figs 5, 6).	
M. serratus n.sp).
- Yellow portion of elytra never of elipsoid shape, aedeagus differen	t
	4



Figs 201–207: Male genitalia of holotypes in ventral and lateral views; Figs 208–211: basal antennal segments of holotypes: 201–202, 210, *Melaneros nigropallescens* n.sp. 203, 209, *M. ibaensis* n.sp. 204–205, 208, *M. albofasciatus* n.sp. 206–207, 211, *M. riedeli* n.sp. Scale = 0.5 mm.

34. Male genitalia with a longitudinal opening in apical portion (Figs 1
11, 204)
- Male genitalia without longitudinal opening at apex 37
35. Anterior third of elytra white, posterior 2/3 yellow, aedeagus as fi
gured (Figs 204, 205). M. albofasciatus n.sp
- Anterior third of elytra mostly yellow, never white
36. Pronotum with folds forming shallow median areola (Fig. 99), ae
deagus stout Figs 1, 2). M. sedlaceki n.sp
- Pronotum with two longitudinal folds divergent forwards (Fig. 103)
aedeagus slenderer (Figs 11, 12). M. baloghi n.sp
37. Male genitalia with a tooth in basal portion
– Male genitalia without a tooth
38. Aedeagus stout and long with a tooth and an opening at base o
phallus (Fig. 201). M. nigropallescens n.sp
- Aedeagus without an opening at base of phallus
39. Antennae long, reaching posterior 1/5 of elvtra, serrate from 3rd se
gment (Fig. 192), eves large, aedeagus as figured (Figs 79, 80). M
prominens n.sp
– Antennae filiform
40. At most anterior half of elvtra vellow
- At least basal 3/5 of elvtra vellow, posterior angles of pronotum la
terally prominent, aedeagus with a small tooth medially (Figs 77
78). M. nigronotatus n.sn
41 Aedeagus with a stout tooth in the middle, basal portion of phallu
with a ridge (Fig. 83, 84). M. brandti n.sn
- Basal portion of phallus simple 4'
42. Base of phallus asymmetrical, phallus laterally curved in basal 2/
(Fig. 74). M. chimbuensis n.sn
- Basal portion of phallus nearly straight in ventral view (Figs 81
82) M. consultus nourly straight in ventur view (11gs of
43 Male genitalia like a curved stick (Figs 56 58 87 93)
- Male genitalia mostly widened in apical portion with hooked pro
iections or of complicated structure
44 Lateral margins of pronotum strongly emarginate (Figs 142, 145) 4
- Lateral margins of pronotum nearly straight (Figs 130, 131, 137) a
most slightly emarginate at base (Fig. 129)
45 Posterior half of elvtra dark brown eves small (Fig. 142) aedeagu
strongly curved dorsoventrally (Figs 87 88) M filum n sn
- Only apex of elvtra infuscate eves large (Fig. 145) aedeagus stron
alv deflected (Figs 93 94) M tennissimus ner
$g_{1}y = (11g_{3} \neq 3, 7 \neq j).$





Figs 212–215: Head and pronotum of holotypes: 212, *Melaneros nigropallescens* n.sp. 213, *M. ibaensis* n.sp. 214, *M. albofasciatus* n.sp. 215, *M. riedeli* n.sp. Scale = 0.5 mm.

52. Pronotum strongly transverse, lateral margins straight (Fig. 113), aedeagus with a rhomboidal extension in apical 1/4 (Fig. 26).

- Pronotum nearly as long as wide, lateral margins emarginate, posterior angles produced obliquely backwards (Fig. 114), aedeagus with oval extension in apical half (Fig. 31).
 M. gravis sp.n.
- 53. Lateral margins of pronotum slightly corrugated, posterior angles sharp (Fig. 136), aedeagus with two dorsal ridges, apex deflected (Figs 66, 67).
 M. admirabilis n.sp.
- Lateral margins of pronotum nearly straight or simply emarginate 54
- 55. Lateral margins of pronotum emarginate (Fig. 123), apical half of aedeagus hooked (Figs 45, 46). **M. semiapertus** n.sp.
- Lateral margins of pronotum straight (Fig. 134), aedeagus with two projections in the middle (Figs 64, 65).
 M. excelsus n.sp.

57. Aedeagus widest in middle portion (Figs 32, 33).

M. dilatatus n. sp.

- Aedeagus widest in apical quarter (Figs 38, 39). M. inflexus n. sp.



Fig. 216: Cladogram for New Guinean Melaneros species groups. ■ – synapomorphies, ■ – synapomorphies with reversals, h – homoplasies.

M. cordatus n.sp.

Several species groups mostly on the basis of the study of the male genitalia can be distinguished within New Guinean species of the genus *Melaneros*. These groups comprise closely related, nevertheless well defined species. In some groups as in *Melaneros sedlaceki* species group a quick speciation probably still lasts which is indicated by the facts that even male genitalia are slightly diversified and that species include a wide range of forms with considerable variability.

1. Melaneros – sedlaceki group

Diagnosis: Antennal segment 3 short, segment 4 at least 1.5 times longer than 3. Aedeagus short, ventromedially and dorsodistally curved, ventroapically compressed, with slot-formed opening distally, provided with two dorsoapical longitudinal ridges. Pronotum with folds sometimes forming shallow median areola or at least flattened in median portion.

Melaneros sedlaceki n.sp. Figs 1, 2, 9, 10, 99, 105, 151, 156.

♂. Body dark brown to black, usually only basal third of elytra yellow, sometimes whole elytra yellow or infuscate even entirely black. Head small, slightly pubescent, eyes mostly black, medium sized (Figs 99, 105), variable, distance between eyes 1.5 to 1.05 times longer than eye diameter. Antennae slender (Fig. 151, 156), segment 1 stout, 2 small, 3 triangular, segment 4 1.7 times as long as 3. Pronotum without carinae but with strong folds forming slight median areola (Fig. 99), anterior margin arcuate, lateral margins slightly divergent backwards, posterior angles projecting laterally. Elytra 3.7 times as long as width at humeri. Posterior trochanters yellow.

Male genitalia stout (Figs 1, 2, 9, 10).

Body length: 6.3–7.6 mm, width at humeri: 1.5–1.85 mm.

Holotype \circ (BMH), Papua New Guinea: Tambul, 2250 m. Paratypes: the same data, 2200 m, 8.VI.1963, J. Sedlacek, 2 \circ (BMH), 2 \circ (LMB); the same data, 26.V.1963, 1 \circ (BMH); Mt Giluwe, 2200 m, 26.V.1963, J. Sedlacek, 1 \circ (BMH), the same data, 2550 m, 27.V.–6.VI.1963, 1 \circ (BMH); the same data, 2800–3280 m, 2.VI.1963, M. Sedlacek, 1 \circ (LMB); Giluwe, 2600 m, without other data, 2 \circ (JS, LMB); Wau, Nami Creek, 1600 m, 24.II.1963, J. Sedlacek, 1 \circ (BMH); Wau, Edie Ck., 2050–2300 m, 18.VIII.1965, J. & M. Sedlacek, 1 \circ (BMH); Aiyura, 1700 m, 9.I.1965, J. Sedlacek, 1 \circ (BMH); V. Watut, WS, 1100–1600 m, 30.IV.1968, J.L. Gressitt,

1 \circ (BMH); Jimmi V. – Baier R., 1750 m, 7.–26.II.1979, J. Sedlacek, 1 \circ (BMH); Mt. Otto, 2200 m, 23.VI.1955, J.L. Gressitt, 1 \circ (LMB); Lake Sirunki, 2570 m, 17.VI.1963, J. Sedlacek lgt, 1 \circ (BMH); Daulo Pass, 2400 m, 7.VII.1963, J. Sedlacek, 1 \circ (BMH); VI.1955, J.L. Gressitt, 1 \circ (LMB); Mt. Kaindy, 2100–2350 m, 1.I.1965, L. & M. Gressitt, 1 \circ (BMH); Mt. Kaindy, 8.I.1969, 1 \circ (JS); 11 km S of Mt. Hagen (town), 2000–2300 m, 20.V.1963, J. Sedlacek, 1 \circ (LMB); Yaibos: 11.–12.VI., 2080 m, 2 \circ (JS, LMB); Mt. Missim, 1 \circ (JS); Iongai, 10 km E of Mt. Albert Edward, 1450 m, 7.XI.1965, J. Sedlacek, 1 \circ (BMH); Bulolo, 15.II., 2400 m, 1 \circ (JS). Indonesia: Irian Jaya, Baliem Tal, 1700 m, III.1992, J. Kolibáč, 5 \circ , 3 $\stackrel{\circ}{}$ (NHMB, LMB), all paratypes.

Etymology: Named in honour of the colletor, Mr. J. Sedlacek (Australia).

Diagnosis: It differs from all other species with partly yellow elytra in the shape of aedeagus and in the shape of pronotum with folds forming a conspicuous median areola.

Variation: *M. sedlaceki* n.sp. is very variable in the body coloration. Particular variability has also been found in the size of eyes, which has never been found in such an extent in any species within this genus. There is also a particular variability range in the shape of male genitalia but the differences do not seem to be significant. Therefore *M. sedlaceki* seems to be a complex of several microspecies but study on this topic would need some additional material.

Melaneros flavofasciatus n.sp.

Figs 3, 4, 100, 152.

 σ . Body black, only elytra with a pale yellow stripe in apical portion reaching from 3/5 to 5/6 of their length. Head with large eyes, eye diameter 1.15 times longer than distance between eyes. Antennae serrate (Fig. 152), reaching apical fourth. Pronotum with anterior angles rounded, posterior angles strongly prominent obliquely backwards (Fig. 100). Elytra conspicuously widened backwards especially in posterior half, 3.7 times longer than width at humeri.

Male genitalia widest in proximal half of phallus (Figs 3, 4).

Body length: 6.8 mm, width at humeri: 1.5 mm.

Holotype of (NHMB): Indonesia, Irian Jaya: Baliem Tal, 1700 m, III.1992, J. Kolibáč; Paratype, of, Irian Jaya, Jayawijaya, Bime, 1600–1900 m, 11.IX.1993, A. Riedel (SMNS).

Etymology: *Flavofasciatus* (Lat.) – with a yellow stripe – refers to beetle's coloration.

Diagnosis: Related to *M. sedlaceki* n.sp. and *M. serratus* n.sp. but differs in body coloratin and in the shape of aedeagus.

Melaneros serratus n.sp.

Figs 5, 6, 101, 153.

 σ . Body black, only basal quarter of elytra with transverse oval, pale yellow spot. Head with prominent eyes, distance between eyes 1.3 times longer than eye diameter. Antennae slightly serrate (Fig. 153), reaching apical quarter of elytra. Pronotum with rounded anterior angles, lateral margins emarginate (Fig. 101), scutellum black. Elytra widened backwards in apical half.

Male genitalia widest in apical quarter, provided with two ridges dorsally (Figs 5, 6).

Body length: 6.4 mm, width at humeri: 1.45 mm.

Holotype \bigcirc (NHMB): Indonesia: Irian Jaya: Baliem Tal, 1700 m, III.1992, J. Kolibáč (NHMB); Paratypes: Jayawijaya, Bime, 1600–1900 m, 11.IX.1993, A. Riedel, 1 \bigcirc (SMNS), Baliem Distr., Pass – Valley, 1900 m, 15.– 16.IX.1990, A. Riedel, 1 \bigcirc (LMB), Bommela, 30.VIII.–1.IX.1992, 1750 m, A. Riedel, 1 \bigcirc (SMNS).

Etymology: Serratus (Lat.) - serrate - refers to beetle's antennae.

Diagnosis: Related to *M. sedlaceki*, but differs in body coloration and in the shape of aedeagus.

Melaneros baloghi n.sp.

Figs 11, 12, 103, 154.

 \circ . Body dark brown, only anterior third to half of elytra yellow.

Head with small eyes, distance between eyes 1.4 times longer than eye diameter. Antennae slender (Fig. 154), reaching apical third of elytra. Pronotum trapezoidal, with two longitudinal folds divergent anteriorly, forming a weak median areola (Fig. 103).

Lateral margins almost straight. Elytra 4.2 times longer than width at humeri, slightly widened posteriorly, sometimes whole suture black.

Male genitalia strongly compressed in terminal quarter (Figs 11, 12). Body length: 4.8 mm, width at humeri: 1.05 mm.

Holotype & (BMH): Papua New Guinea: Nondug, 750 m, 8.VII.1955, J.L. Gressitt; Paratype & (HMB), Wau, Eddy Creek, 2050 m, 30.VIII.1968, L. Balogh.

Etymology: Named in honour of Dr. J. Balogh (Budapest).

Diagnosis: It differs from related *M. sedlaceki* n.sp. in the shape of aedeagus.

Melaneros albofasciatus n.sp.

Figs 204, 205, 208, 214.

 o^* . Body dark brown to black, anterior third of elytra white, posterior 2/3 yellow with black margins. Head with small eyes, distance between eyes longer than eye diameter. Antennae (Fig. 208), segment 3 is 1.4 times shorter than 4. Pronotum nearly semicircular, anterior angles rounded (Fig. 214), lateral margins emarginate. Elytra parallel-sided, 3.4 times longer than width at humeri.

Male genitalia (Figs 204, 205) resembles those of M. serratus n.sp., but provided with widely bordered apical opening (these folds not narrowed in apical 1/6 of phallus), ventrally curved in basal half.

Body length: 5.5 mm; width at humeri: 1.3 mm.

Holotype o^* (SMNS), Indonesia, Irian Jaya, Mokwam, Kwau, 1300–1650 m, 17.IV.1993, A. Riedel.

Etymology: Albofasciatus (Lat.) – refers to beetle's body coloration.

Diagnosis: *M. albofasciatus* n.sp. is the only known *Melaneros* species with partly white elytra. Related to *M. serratus* n.sp., but differs in the shape of phallus which is widely bordered apically and ventrally curved in basal portion.

Melaneros quateorum n.sp.

Figs 7, 8, 104, 155.

 \bigcirc . Body dark brown, only margins of pronotum, trochanters and bases of femora yellow. Head with large eyes, eye diameter 1.5 times longer than distance between eyes. Antennal segmnet 2 shorter than 3 (Fig. 155). Pronotum with lateral margins emarginate and slightly widened posteriorly. Elytra nearly parllel-sided.

Aedeagus widest medially (Figs 7, 8).

Body length; 4.3 mm, width at humeri: 1.1 mm.

Holotype S' (BMH): Indonesia, Irian Jaya: Vogelkop: Kebar V., W of Manokwari, 550 m, 4.– 31.I.1962, S. & L. Quate.

Etymology: Named in honour of collectors.

Diagnosis: Within M. – sedlaceki group easily distinguishable by strongly transverse pronotum, body coloration and the shape of aedeagus.

2. Melaneros – admirabilis group

Diagnosis: Antennal segment 3 long, phallus semicircularly produced dorsally (shared with *M. sentus* group), provided with two dorsoapical longitudinal ridges (shared with *M. sedlaceki* group).

Melaneros admirabilis n.sp.

Figs 66, 67, 136, 185.

 σ . Body dark brown to black, only basal 2/5 of elytra yellow, even whole elytra black. Head with small eyes, distance between eyes 1.5 times longer than eye diameter. Pronotum transverse (Fig. 136), anterior angles sharp, lateral margins sinuate, posterior angles acute. Elytra parallel-sided, 3.3 times longer than wide at humeri.

Male genitalia small (Figs 66, 67), phallus proximally hooked, provided with two dorsal longitudinal ridges and with folded belts ventrally in proximal half.

Body length: 5.9 mm; width at humeri: 1.5 mm.

Holotype \bigcirc (BMH): Papua New Guinea: Wau, 12.X., J. & M. Sedlacek; Paratypes: Wau, Big Creek, 1200 m, IX.1965, P. Shanahan, 2 \bigcirc (BMH), Wau, 12.IX., 1150 m, , without other data, 1 \bigcirc (JS); Wau, 1250–1300 m, 11.X.1962, J. Sedlacek, 1 \bigcirc (LMB); Karimui, 1080 m, VII.1963, M. Sedlacek, 1 \bigcirc (BMH).

Etymology: Admirabilis (Lat.) - admirable, refers to beetle's shape of aedeagus.

Diagnosis: Easily distinguishable from all other known species in the shape of pronotum (Fig. 136) and in the complicated shape of aedeagus with two dorsal longitudinal ridges in which it resembles *Melaneros* – *sedlaceki* group.

3. Melaneros – sentus group

Diagnosis: Antennal segment 3 long, segment 4 at most 1.2 times longer than 3. Apex of phallus with two hooked long ventrolateral projections, each often acutely terminated. Distal portion of phallus with an apical orifice, phallus semicircularly produced ventrolaterally.

Melaneros sentus n.sp.

Figs 17, 107, 160.

♂. Body dark brown, only pronotum, ventral side of prothorax, scutellum, trochanters and bases of femora yellow. Head with extremely large eyes, eye diameter in lateral view twice longer than distance between eyes. Antennae (Fig. 160) reaching apical third. Scutellum yellow. Pronotum with anterior margin produced forwards, lateral margins almost straight (Fig. 107). Elytra parallel–sided, 3.4 times longer than width at humeri.

Male genitalia widest in median portion of phallus, provided with two sharp hooked thorns distally (Fig. 17).

Body length: 4.75 mm, width at humeri: 1.15 mm.

Holotype \circ (BMH): Papua New Guinea: Wewak, Sepik Distr., 30 m, 26.VI.1961, J.L. Gressitt.

Etymology: *sentus* (Lat.) – provided with thorns – refers to beetle's aedeagus.

Diagnosis: Related to *M. maai* n.sp. but differs in having yellow scutellum and in the shape of aedeagus.

Melaneros ibaensis n.sp.

Figs 203, 209, 213.

 σ . Body dark brown to black. Head with prominent eyes, eye diameter 1.5 times longer than distance between eyes. Antennae (Fig. 209) reaching to apical third of elytra. Pronotum strongly transverse (Fig. 213), lateral margins emarginate, posterior angles prominent obliquely backwards. Elytra 3.2 times longer than wide, weakly widened backwards.

Aedeagus (Fig. 203) of complicated structure, phallus stout, widest in proximal fourth. Distal portion provided with two hooked projections, each with a thorn.

Body length: 4.9 mm, width at humeri: 1.3 mm.

Holotype \bigcirc^* (SMNS): Indonesia, Irian Jaya: Iba, 1300 m, 7.–8. IV.1993, A. Riedel.

Etymology: Named in reference to the type locality.

Diagnosis: Related to *M. sentus* n.sp., but differs in having black pronotum and in the shape of aedeagus.

Melaneros praecipuus n.sp.

Figs 18, 108, 161.

 \bigcirc . Body dark brown, only pronotum, thorax, trochanters and bases of femora yellow. Head with prominent eyes, eye diameter 1.4 times longer than distance between eyes. Pronotum with rounded anterior angles, lateral margins nearly parallel (Fig. 108). Scutellum brown. Elytra 2.9 times longer than width at humeri, parallel–sided.

Male genitalia with two long hooked projections distally (Fig. 18). Body length: 4.45 mm, width at humeri: 1.25.

Holotype ♂ (BMH), Indonesia, Irian Jaya: Hollandia – Binnen, 100 m, 1.XI.1958, J. L. Gressitt.

Etymology: *Praecipuus* (Lat.) – peculiar, refers to beetle's aedeagus. Diagnosis: Related to *M. sentus* n.sp. but differs in having smaller eyes and much longer apical projections of phallus.

Remark: Whole right antenna and 4–11 segments of left antenna of holotype missing.

Melaneros flavohumeralis n.sp.

 \circ . Body dark brown to black, only humeral portions of elytra yellow. Head with large eyes, eye diameter 1.25 times longer than distance between eyes, antennae reaching apical 1/4 of elytra.

Pronotum with rounded anterior angles (Fig. 112) and relatively deep longitudinal groove on each side. Elytra nearly parallel-sided, relatively broad, only 2.9 times longer than width at humeri.

Male genitalia with two hooked projections along apical half of phallus, each provided with a thorn (Figs 24, 25).

Body length: 6.0 mm, width at humeri: 1.75 mm.

Holotype of (BMH): Papua New Guinea: Big Wau Creek, 1200 m, XII.1965, J. & M. Sedlacek; Paratypes, the same data, 1050 m, 25.VII., 1 of (BMH), Bulolo R., 850 m, 24.VIII.1965, 1 of (JS).

Etymology: *Flavohumeralis* (Lat.) – yellow in humeral portion, refers to beetle's body coloration.

Diagnosis: It differs from all known species in the shape of aedeagus.

Melaneros maai n.sp.

Figs 15, 16, 106, 159.

 \bigcirc . Head, antennae, scutellum, elytra and apices of femora and tibiae dark brown, pronotum, ventral side of thorax, trochanters, bases of femora and tibiae yellow. Head with very large eyes, eye diameter twice longer than distance between eyes. Pronotum with anterior margin strongly produced forwards, lateral margins weakly emarginate, posterior angles acute (Fig. 106). Elytra nearly parallel–sided, 3.3 times longer than width at huneri.

Male genitalia with two longitudinal ridges in median portion, provided with two symmetrical hooked projections distally (Figs 15, 16).

Body length: 5.5 mm, width at humeri: 1.4 mm.

Holotype ♂ (BMH), Indonesia, Irian Jaya, Waris, S of Hollandia, 450–500 m, 1.–2.VII.1959, T.C. Maa; Paratypes: W Sentani, Cyclops Mts. 150–250 m, 17.VI.1959, T.C. Maa , 2 ♂ (BMH, LMB).

Etymology: Named in honour of the collector.

Diagnosis: Related to *M. sentus* n.sp. but differs in having brown scutellum and in the shape of aedeagus.

4. Melaneros – cornutus group

Diagnosis: Aedeagus with two short hooked ventroapical projections, apical quarter of phallus without an opening which is mooved to median portion. In other characters this group corresponds to Melaneros – sentus group.

Melaneros cornutus n.sp.

Figs 21, 22, 110, 162.

 σ . Body dark brown, only pronotum, thorax, trochanters and bases of femora yellow, scutellum yellowish brown. Head with extremely large eyes, eye diameter 2.5 times longer than distance between eyes. Antennae (Fig. 162) reaching apical quarter of elytra. Pronotum with anterior margin produced forwards, lateral margins nearly straight (Fig. 110). Elytra parallel-sided, 2.9 times longer than width at humeri.

Male genitalia laterally curved, provided with two small teeth in apical third (Figs 21, 22).

Body length: 4.3 mm, width at humeri: 1.25 mm.

Holotype \bigcirc (BMH): Papua New Guinea: Madang, 5 m, 28.X.1958, J. L. Gressitt.

Etymology: Cornutus (Lat.) - horny, refers to beetle's aedeagus.

Diagnosis: It is related to M. proprius n.sp. but differs in having much larger eyes and in the shape of aedeagus.

Melaneros proprius n.sp.

Figs 23, 111, 163.

 σ . Body dark brown, only pronotum, thorax, trochanters and bases of femora yellow. Head with large eyes, eye diameter 1.25 times longer than distance between eyes. Antennae slender (Fig. 163), reaching apical fifth of elytra. Pronotum with lateral margins slightly emarginate (Fig. 111), posterior angles projected obliquely backwards. Elytra parallel-sided, 3.2 times longer than width at humeri.

Male genitalia semicircularly curved in median portion, provided with a hooked emarginate protrusion in apical third, distal portion rounded (Fig. 23).

Body length: 4.1 mm, width at humeri: 1.1 mm.

Holotype o' (BMH): Indonesia, Irian Jaya: Biak I., Mangrowawa, 50–100 m, 30.V.1959, J. L. Gressitt.

Etymology: Proprius (Lat.) - peculiar, refers to beetle's aedeagus.

Diagnosis: Related to M. cornutus n.sp. but differs in having much smaller eyes, lateral margins of pronotum emarginate and in the shape of aedeagus.

Melaneros inclinatus n.sp.

Figs 19, 20, 109, 158.

♂. Body dark brown, only pronotum and anterior half of elytra yellowish brown. Head with large eyes, eye diameter in lateral view 1.25 times longer than distance between eyes, antennae slender (Fig. 158). Pronotum with lateral margins gradually emarginate (Fig. 109), anterior margin sharply produced forwards. Pronotum predominantly yellow, in median portion rather darker. Scutellum light brown, weakly emarginate distally. Elytra moderately widened backwards, 3.5 times longer than width at humeri.

Male genitalia laterally wound, provided with a tooth in apical third (Figs 19, 20).

Body length: 5.8 mm, width at humeri: 1.4 mm.

Holotype S^{*} (BMH): Indonesia, Irian Jaya: Wisselmeren, Obano, 1770 m, 9.VIII.1955, J. L. Gressitt.

Etymology: *Inclinatus* (Lat.) – hooked, refers to beetle's aedeagus. Diagnosis: In body coloration resembles *M. decoctus* sp.n. but different aedeagus.

Remark: Holotype with damaged antennae, segments 3-11 (right antenna) and 6-11 (left antenna) are missing.

5. Melaneros – riedeli group

Diagnosis: Antennal segment 3 long. Phallus laterally wound in median portion, medially bifurcated, distally attached (Figs 206, 207).

Melaneros riedeli n.sp.

Figs 206, 207, 211, 215.

 \circ . Body dark brown to black. Head with small eyes, distance between eyes 1.5 times longer than eye diameter. Antennae (Fig. 211) reaching to elytral midlength. Pronotum transverse (Fig. 215), lateral margins emarginate, posterior angles prominent obliquely backwards. Elytra 3.2 times longer than wide, slightly widened posteriorly. Male genitalia strongly curved in distal half (Figs 206, 207), composed of 2 curved bends attached medially and distally. Apex asymetrically bilobed.

Body length: 4.8 mm; width at humeri: 1.2 mm.

Holotype ♂ (SMNS): Indonesia, Irian Jaya: Jayawijaya, Bommela, 1750 m, 30.VIII.–1.IX.1992, A. Riedel.

Etymology: Named in honour of the collector – Mr. A. Riedel (Munich, Germany).

Diagnosis: Strikingly different from all other New Guinean species in the shape of aedeagus.

6. Melaneros – samuelsoni group

Diagnosis: Antennal segment 3 long, phallus simply staff-formed, variously wound, mostly without any conspicouous orifice. If the orifice is indicated then it is moved in median portion of phallus.

Melaneros aduncus n.sp.

Figs 54, 55, 131, 179.

♂. Body dark brown, only basal 2/5 of elytra yellow, also trochanters and bases of femora rather lighter. Head with large eyes, eye diameter 1.05 times longer than distance between eyes. Antennae slender, slightly serrate, segment 4 is 1.3 times longer than 3. Antennae long, reaching over apical third of elytra. Pronotum transverse, anterior margin strongly produced forwards. Lateral margins almost straight, divergent posteriorly (Fig. 131). Basal margin sinuate, posterior angles acute. Scutellum dark brown, slightly emarginate apically. Elytra nearly parallel-sided, 3.25 times longer than width at humeri.

Male genitalia strongly flexuous (Figs 54, 55).

Body length: 4.6 mm, width at humeri: 1.2 mm.

Holotype \bigcirc (BMH): Papua New Guinea, Wau, 1200–1300 m, 14.IX.1965, J. Sedlacek; Paratypes – Mt. Missim, 14.III.1968, P. Colman, 1 \bigcirc (BMH); Iongai, 10 km E of Mt. Albert Edward, 1450–1800 m, J. Sedlacek, 1 \bigcirc (LMB); Wau, 2.IX.1965, 1 \bigcirc (JS).

Etymology: Aduncus (Lat.) - curved, refers to beetle's aedeagus.

Diagnosis: *M. aduncus* n.sp. is easily distinguishable from all other known species of the genus in the shape of aedeagus.

Remark: In some specimens pronotal margins somewhat lighter.

Melaneros samuelsoni n.sp.

Figs 56, 57, 129, 180.

 \odot . Body dark brown, only basal 2/5 of elytra and mostly trochanters yellow. Head small, shining, eyes large, eye diameter in lateral view 1.6 times longer then distance between eyes. Antennae reaching elytral midlength, segments 4–10 slightly serrate (Fig. 180), provided with erect pubescence. Segment 4 is 1.3 times longer than 3. Pronotum with anterior margins strongly produced forwards, lateral margins nearly parallel, slightly emarginate, posterior angles acute, projecting obliquely posteriorly (Fig. 129). Elytra with basal third to 2/5 yellow, slightly pubescent. Scutellum black, apically emarginate. Elytra 3.4 times longer than width at humeri.

Male genitalia weakly curved (Figs 56, 57).

Body length: 4.6–5.3 mm, width at humeri: 1.18–1.22 mm.

Holotype of (BMH): Papua New Guinea: Wau, 1200-1300 m, 14.IX.1965, J. Sedlacek. Paratypes: Wau, 1200-1300 m, Morobe Distr., 5.-6.XII.1961, J. Sedlacek, 1 & (BMH): dtto, IX. 1965, P. Shanahan, 1 of (BMH): 29.XI.–30.XII.1965, P. Shanahan, 2 of (BMH): same 13.X.1961, 14.IX. the data, 1965, 2 ♂ (LMB), 15.-16.VIII.1964, 1 of (NHMB); Mt. Missim, 2100 m, 21.XII.1968, J. Sedlacek, 1 of (BMH); Mt. Missim, 1300 m, 7.–21.XII.1966, G. A. Samuelson, 1 or (BMH): 23.IV.1963, 1 or (JS); U Watut, SW, 1500–1800 m, 3.V.1968, 1 or (BMH); Kunai Ck., 1500 m, 22.V.1968, 1 of (BMH); Wau, 14.–22.IX.1972, Moczár, 2 of (HMB), 1 of (LMB).

Etymology: Named in honour of Dr. S. A. Samuelson (Honolulu) who provided me with the largest part of the studied material.

Diagnosis: It differs from other species in having large eyes, acute posterior angles of pronotum and in the shape of aedeagus.

Melaneros filum n.sp.

Figs 87, 88, 142, 196.

♂. Body dark brown, only anterior half of elytra yellow. Head with inconspicuous antennal tubercles, distance between eyes 1.6 times longer than eye diameter. Antennae slender, reaching elytral midlength. Pronotum transverse, anterior margin produced forwards, lateral margins divergent backwards, slightly emarginate (Fig. 142). Posterior angles acute. Elytra 4 times longer than width at humeri, nearly parallel-sided.

Male genitalia like a curved stick, thickened proximally (Figs 87, 88). Body length: 5.1 mm, width at humeri: 1.1 mm.

Holotype \bigcirc (BMH): Papua New Guinea: 8 km W of Okapa, 1870 m, 29.VIII.1964, J. & M. Sedlacek; Paratypes: Tambul, 2200–2250 m, 26.V.1963, J. Sedlacek, 2 \bigcirc (BMH, JS).

Etymology: Filum (Lat.) - threadlike, refers to beetle's aedeagus.

Diagnosis: Related to *M. tenuissimus* n.sp. but differs in having much smaller eyes as well as in the body coloration and the shape of aedeagus.

Melaneros tenuissimus n.sp. Figs 93, 94, 145, 199.

 σ . Body dark brown, only elytra yellowish brown. Head with large eyes, eye diameter in lateral view 1.5 times longer than distance between eyes. Antennae slender, segment 3 shorter than 4 (Fig. 145). Pronotum small, with anterior angles strongly produced forwards, lateral margins nearly emarginate, divergent backwards. Posterior angles acute.

Male genitalia like a stick, without any tooth (Fig 93, 94). Body length: 6.5 mm, width at humeri: 1.5 mm.

Holotype σ (BMH): Papua New Guinea, Kepilam, 2420–2490 m, 23.VI.1963, J. Sedlacek; Paratypes: the same data, 1 σ (BMH); M. Sinonki, 2580 m, 16.VI. – without other data, 1 σ (JS).

Etymology: *Tenuissimus* (Lat.) – the weakest, refers to beetle's ae-deagus.

Diagnosis: easily distinguishable by very large eyes and the shape of aedeagus.

Melaneros gressitti n.sp.

Figs 95, 96, 146.

 \circ . Body dark brown to black. Head with prominent eyes, their diameter 1.15 times longer than distance between eyes. Antennae nearly missing (only segments 1–2 of right antenna present). Pronotum transverse, lateral margins nearly parallel, posterior angles acute (Fig. 146). Elytra nearly parallel-sided, 3.1 times longer than wide.

Male genitalia stick – formed (95, 96), weakly laterally curved distally, strongly curved ventrally in apical portion.

Body length: 4.05 mm, width at humeri: 1.1 mm.

Holotype \circ (BMH): Papua New Guinea, Kokoda, 400 m, 22. III. 1956, J.L. Gressitt.

Etymology: Named in honour of the collector.

Diagnosis: It differs from *M. simplex* n.sp. in having lateral margins of pronotum nearly parallel and in phallus ventrally hooked only distally.

Melaneros simplex n.sp.

Figs 97, 98, 150, 200.

 σ . Whole body dark brown to black. Head with relatively large eyes, their diameter 1.25 times longer than distance between eyes. Antennae (Fig. 200) slightly serrate, reaching over apical third of elytra. Pronotum transverse (Fig. 150), lateral margins strongly emarginate. Elytra nearly parallel-sided, 3.5 times longer than width at humeri.

Male genitalia like a simple stick, gradually curved ventrally (Figs 97, 98).

Body length: 4.45 mm; width at humeri: 1.1 mm.

Holotype S^{*} (BMH): Papua New Guinea: Wau, Morobe distr., 1100 m, 2.IX.1961, J. Sedlacek; Paratype, S^{*}, Wau, Kilolo Creek, 26.VIII.1968, J. Balogh (HMB).

Etymology: Simplex (Lat.) - simple, refers to beetle's aedeagus.

Diagnosis: It differs from M. gressitti n.sp. in having

lateral margins of pronotum strongly emarginate and in the gradually curved phallus.

Remark: Antennae of the holotype (except segments 1–2 of right antenna) missing.

7. Melaneros – wauensis group

Diagnosis: Antennal segment 3 long, phallus simply staff-formed, variously wound, orifice moved to median portion, provided with two folded ventromedial belts.

Melaneros wauensis n.sp. Figs 58, 59, 130, 181.

 \circ . Body dark brown to black, only basal third of elytra yellow. Head with antennal tubercles slightly developed. Distance between eyes 1.07 times longer than eye diameter. Antennae slender, slightly serrate (Fig. 181), reaching elytral midlength. Segment 4 is 1.2 times longer than 3. Pronotum transverse, with strong depression in both anterior angles. Lateral margins divergent backwards, posterior angles obliquely projected posteriorly (Fig. 130). Scutellum subquadrate, weakly emarginate apically. Elytra 3.2 times longer than width at humeri, slightly widened posteriorly.

Male genitalia medially emarginate, provided with two folds reaching from ventro-medial emargination to dorsal curvature of phallus, stout at apex (Figs 58, 59).

Body length: 4.5 mm, width at humeri: 1.2 mm.

Holotype ♂ (BMH): Papua New Guinea: Wau, 1200–1300 m, 14.IX.1965, J. Sedlacek; Paratypes: Mt. Missim, 1200 m, 7.–21.XII. 1966, G. A. Samuelson, 1 ♂ (BMH); Wau, 1150–1600 m, 9.II.1968, J. Sedlacek, 1 ♂ (JS); Wau, Mt. Kaindi, 7.X.1992, 1550 m, A. Riedel, 2 ♂ (SMNS). Etymology: Named in reference to the type locality.

Diagnosis: It is closely related to *M. samuelsoni* n.sp. from which it differs in much smaller eyes and in the shape of phallus.

Remark: Some variability in body coloration was found out in this species. The specimen from Simbai (Bismarck range) has only the basal fourth of elytra yellow and the whole specimen is rather darker.

Melaneros deflectus n.sp.

Figs 60, 61, 128, 182.

 \circ . Body dark brown to black. Head with eyes slightly prominent, distance between eyes 1.2 times longer than eye diameter. Antennae

(Fig. 182) reaching apical third of elytra. Pronotum transverse, anterior margin produced forwards, lateral margins divergent posteriorly (Fig. 128). Elytra parallel-sided, three times longer than width at humeri.

Male genitalia only with a weak ventro-medial emargination, constricted in apical quarter, apex relatively thin (Figs 60, 61).

Body length: 4.4 mm, width at humeri: 1.2 mm.

Holotype ♂ (BMH): Papua New Guinea: Wau, 1200 m, 7.II.1970, J. Sedlacek;

Paratypes: Wau, 22.III.1965, J. & M. Sedlacek, 1 o' (BMH); Wau, 10.–12.IX.1972, L. Móczár, 1 o' (HMB).

Etymology: *Deflectus* (Lat.) – hooked, refers to beetle's aedeagus. Diagnosis: Related to M. *wauensis* n.sp., but differs in body coloration and in the shape of aedeagus.

Melaneros falcatus n.sp.

Figs 62, 63, 133, 183.

 σ . Body dark brown to black, very small. Head with slightly prominent eyes, their diameter as long as distance between eyes. Antennae (Fig. 183) almost reaching apical third of elytra. Pronotum with lateral margins slightly emarginate, posterior angles prominent obliquely backwards (Fig. 133). Elytra 2.8 times longer than width at humeri, nearly parallel-sided, with 3rd primary costa much stouter.

Male genitalia laterally curved medially, provided with two narrow folds ventrally, along the curvature.

Body length: 3.3 mm, width at humeri: 1.0 mm.

Holotype \bigcirc (BMH): Papua New Guinea: Maprik, 160 m, 14.X.1957, J.L. Gressitt; Paratype: Indonesia, Irian Jaya, Sentani, Cyclops Mts., 300–450 m, 7.–10.VIII.1992, A. Riedel, 1 \bigcirc (SMNS).

Etymology: Falcatus (Lat.) - sickle-shaped - refers to beetle's aedeagus.

Diagnosis: Related to *M. deflectus* n.sp. from which it differs in much larger eyes, in the shape of pronotum and particularly in having narrow phallus with a strong curvature medially.

Melaneros simbaiensis n.sp. Figs 68, 69, 137, 186.

♂ Body dark brown, only anterior quarter of elytra yellow.

Head with eyes relatively prominent, distance between eyes 1.1 times longer than eye diameter. Antennae reaching over elytral middlength. Pronotum trapezoidal, with apical margins straight, (Fig. 137). Elytra 3.8 times longer than width at humerus.

Scutellum nearly square.

Body length: 5.3 mm, width at humeri: 1.25 mm.

Holotype ♂ (BMH): Papua New Guinea: Simbai, Bismarck Range, 1900 m, 29.V.1966, J.L. Gressitt.

Diagnosis: Related to M. deflectus n.sp., but differs in body coloration and in the shape of aedeagus.

Etymology: Named in reference to the type locality.

8. Melaneros – guineensis group

Diagnosis: Antennal segment 3 long. Phalus provided with a lateral dent medially, orifice at least indicated in median portion. Apex simply staff-formed usually curved ventrally.

Melaneros guineensis (Pic), n.comb.

Figs 70, 71.

Graciloplateros guineensis PIC, 1921: 2 (lectotype male and 2 paralectotypes males hereby designated from Irian Jaya, Indonesia). Plateros bicolor KLEINE, 1939: 112 – **n.syn.**

♂. Body dark brown, only pronotum, trochanters and bases of femora yellowish brown. Head with very large eyes, their diameter twice longer than distance between eyes. Antennae filiform, reaching over elytral midlength. Pronotum with anterior margin semicircular, produced forwards. Lateral margins nearly straight, convergent anteriorly. Elytra parallel-sided, 3.4 times longer than width at humeri.

Phallus provided with a stout extension proximally, then with a lateral emargination also in basal half. Distal portion pole-shaped (Figs 70, 71).

Material examined: Indonesia, Irian Jaya: Indonesia, Irian Jaya: \circ , Nouvelle Guinée, Humboldt Bay, 3 syntypes of Graciloplateros guineensis Pic – (MP); Holotype of Plateros bicolor, \circ , Dutch New Guinea: Cyclops Mts., Sabron, 950 ft., IV.1936, L.E. Cheesman (BM), Rawlinson Gbg., S.O.N. Guinea: 1 \Leftrightarrow (ZIW). Indonesia, Irian Jaya: Cyclops Mts, 17.IV.1959, T.C. Maa 2 \circ (BMH, LMB), Wisselmeren, Kamo, 1500–1700 m, J. Sedlacek, 3 \circ (BMH, LMB); Ifar, Cyclops Mts, 28.VI.1962, J.L. Gressitt, 1 \circ (BMH).

Diagnosis: It differs from related *M. sollemnitex* n.sp. in having brown scutellum, straight lateral margins of pronotum and in phallus with lateral emargination proximally.

Melaneros sollemnitex n.sp.

Figs 72, 73, 138, 188.

♂ Body dark brown to black, pronotum, scutellum, trochanters and bases of femora yellow. Head with large eyes, their diameter 1.7 times longer than distance between eyes. Antennae (Fig. 188) reaching elyt-

ral midlength. Pronotum transverse, with lateral margins nearly parallel, slightly emarginate (Fig. 138). Elytra almost parallel-sided, three times longer than width at humeri.

Male genitalia gradually thickened proximally, provided with a tooth medially, pole-shaped distal portion ventrally curved (Figs 72, 73).

Body length: 4.0 mm, width at humeri: 1.1 mm.

Holotype \circ (BMH): Papua New Guinea: Rubia, Markham, 50 m, IX.1955, J.L. Gressitt; Paratypes: Morobe Distr., Miudik, 1200–1600 m, IX.1968, N.L.G. Krauss, 1 \circ (LMB); Wewak, 2–20 m, 13.X.1957, J.L. Gressitt, 1 \circ (BMH); Indonesia: Irian Jaya: Waris, 450 m, 27.VII.1959, T.C. Maa, 1 \circ (BMH); Hollandia-Binnen, 100 m, 1.XI.1958, J.L. Gressitt, 1 \circ (BMH).

Etymology: Sollemnitex (Lat.) - usual, refers to beetle's aedeagus.

Diagnosis: Related to *M. guineensis* (Pic) but differs in having yellow scutellum, emarginate lateral margins of pronotum and in the shape of proximal portion of phallus.

Melaneros chimbuensis n.sp.

Figs 74, 148, 189.

♂ Body dark brown to black, only anterior 1/4 to 1/2 of elytra yellow. Head with slightly developed antennal tubercles, eyes prominent, distance between eyes 1.4 times longer than eye diameter. Antennae reaching over elytral middlength. Pronotum transverse, (Fig. 148), 1.4 times broader than long, trapezoidal, with prominent posterior angles. Scutellum black slightly emarginate apically. Elytra 3.5 times longer than width at humeri.

Male genitalia laterally arcuate, tapering towards apex, phallus asymmetrically widened proximally (Fig. 74).

Body length: 5.1 mm, width at humeri: 1.2 mm, Holotype ♂ (BMH): Papua New Guinea: Chimbu Valley, 1800 m, 16.V.1963, J. Sedlacek; Paratypes – the same data, 1 ♂, West Highland, Kamans near Minj, 1840 m, 21.V.1966, J.L. Gressitt, 3 ♂ (BMH, NHMB, LMB); Minj, 8.–13.IX.1959, T.C. Maa, 2 ♂ (BMH).

Etymology: Named in reference to the type locality.

Diagnosis: Related to *M. decoctus* n.sp. from which it differs in body coloration and in the shape of aedeagus.

Melaneros decoctus n.sp.

Figs 75, 76, 135, 190.

 σ Body dark brown, pronotum, scutellum, and elytra except apical 1/12 yellow. (Scutellum, median portion of pronotum and humeri somewhat darker.) Head with large eyes, their diameter 1.4 times longer than distance between eyes. Antennae slender (Fig. 190) nearly reaching apical third of elytra. Pronotum transverse (Fig. 135), lateral margins divergent posteriorly, weakly emarginate. Scutellum yellowish brown, slightly emarginate apically. Elytra nearly parallel-sided, 3.7 times longer than width at humeri.

Aedeagus resembles that of *M. chimbuensis* n.sp., but phallus symmetrically widened proximally (Figs 75, 76).

Body length: 5.7 mm, width at humeri: 1.4 mm.

Holotype ♂* (BMH): Papua New Guinea: Simbai, Bismarck Range, 1660 m, 26.V. 1966, J.L. & M. Gressitt.

Etymology: Decoctus (Lat.) - faint, refers to beetle's coloration.

Diagnosis: Resembles M. montanus n.sp. in body coloration from which it differs in having apical 1/12 of elytra dark brown and in the shape of aedeagus. Related to M. chimbuensis n.sp., but differs in body coloration, in having much larger eyes and in the shape of basal portion of phallus.

Melaneros nigronotatus n.sp.

Figs 77, 78, 139, 191.

 \circ . Body black to dark brown, elytra yellowish except their apical 1/5 and apical half of suture. Head with prominent eyes, distance between eyes 1.15 times longer than eye diameter. Antennae slender (Fig. 191), reaching elytral midlength. Pronotum dark brown, with lateral margins strongly emarginate (Fig. 139), posterior angles acute. Scutellum dark brown. Elytra nearly parallel-sided, 4 times longer than width at humeri.

Male genitalia stout, provided with a tooth medially and a strong stick distally (Figs 77, 78).

Body length: 6.4 mm, width at humeri: 1.3 mm.

Holotype \circ (BMH): Papua New Guinea: Mt. Giluwe, 2550 m, 27.V. 1963, J. Sedlacek; Paratype, Mt. Giluwe, 2500 m, without other data, 1 \circ (JS).

Etymology: Nigronotatus (Lat.) – refers to beetle's pronotum.

Diagnosis: Related to *M. montanus* n.sp. but differs in having smaller eyes, antennae filiform and in the shape of aedeagus.

Melaneros prominens n.sp.

Figs 79, 80, 141, 192.

 \circ Body black to dark brown, only basal fourth to half of elytra yellow. Head with large eyes, their diameter as long as distance between eyes. Antennae slender, slightly serrate (Fig. 192), reaching apical fourth of elytra, covered with erect pubescence, hairs slightly longer than width of the segment. Segment 4 is 1.3 times longer than 3. Scutellum dark brown, slightly emarginate apically. Pronotum small, with posterior angles obliquely projected, lateral margins emarginate, anterior margin produced forwards (Fig. 141). Elytra 3.7 times longer than width at humeri, slightly widened posteriorly.

Aedeagus small, provided with a tooth medially (Figs 79, 80).

Body length: 5.9 mm, width at humeri: 1.3 mm.

Holotype \circ (BMH): Papua New Guinea: Mt. Giluwe, 2550 m, 27.V. 1963, J. Sedlacek. Paratype: Giluwe, 2550 m, without other data, 1 \circ (JS), Banz, 6.III. 1 \circ (JS).

Etymology: *Prominens* (Lat.) – prominent, refers to beetle's posterior angles of pronotum.

Diagnosis: Related to *M. nigronotatus* n.sp., but differs in eye diameter and in the shape of phallus.

Melaneros consuetus n.sp.

Figs 81, 82, 140, 193.

 \circ . Slender species, body dark brown, only humeral portions of elytra yellow, whole suture dark brown. Head with small eyes, their diameter 1.1 times longer than distance between eyes.

Antennae (Fig. 193) reaching apical third of elytra. Pronotum trapezoidal (Fig. 140), lateral margins converging forwards, slightly emarginate. Scutellum black, weakly emarginate apically.

Elytra nearly parallel-sided, 4–5 times longer than width at humeri. Male genitalia resemble those of *M. sollemnitex* n.sp., proximal 1/8 of phallus straight dorsally (lateral view).

Body length: 4.1 mm, width at humeri: 0.82 mm.

Holotype \bigcirc^* (BMH): Papua New Guinea: Minj, W. Highlands, 8.-13.

IX.1959, T.C. Maa.

Etymology: *Consuetus* (Lat.) – usual, refers to beetle's shape of ae-deagus.

Diagnosis: Related to *M. chimbuensis* n.sp. from which it differs in body coloration, in the shape of pronotum which is divergent posteriorly and in the shape of basal portion of the phallus.

Melaneros brandti n.sp.

Figs 83, 84, 149, 194.

 \circ Body dark brown to black, only anterior third of elytra yellow, whole suture dark brown. Head with eyes not very prominent, distance between eyes 1.2 times longer than eye diameter, eyes partly hidden

beneath pronotum. Antennae (Fig. 194) reaching elytral midlength. Pronotum transverse (Fig. 149), lateral margins nearly parallel, posterior angles prominent obliquely backwards. Scutellum dark brown, weakly emarginate apically. Elytra parallel-sided, 3.3 times longer than width at humeri.

Male genitalia provided with a stout tooth medially, basal portion of phallus thickened, with a ridge ventrally (Fig. 83).

Body length: 4.8 mm, width at humeri: 1.25 mm.

Holotype ♂ (BMH): Papua New Guinea: Finisterre Range, Saidor, Matoko, 28.VIII.–5.IX.1958, W.W. Brandt.

Etymology: Named in honour of the collector.

Diagnosis: Related to *M. bulolensis* n.sp. but differs in body coloration and in the shape of male genitalia.

Melaneros bulolensis n.sp.

Figs 85, 86, 147, 195.

 \bigcirc . Body dark brown to black. Head with small eyes, distance between eyes 1.1 times longer than eye diameter. Antennae (Fig. 195) reaching over elytral midlength. Pronotum with anterior margin arcuate, lateral margins nearly parallel, weakly emarginate (Fig. 147). Elytra nearly parallel-sided, 3.3 times longer than width at humeri.

Male genitalia resemble those of M. brandti (Figs 85, 86).

Body length: 4.8 mm, width at humeri: 1.2 mm.

Holotype \circ (BMH): Papua New Guinea: Wau, 1200–1300 m, 14.IX. 1965, J. Sedlacek. Paratypes: the same data, 1 \circ (LMB); Wau Bulolo R., 800–1100 m, 25.IX.1965, J. Sedlacek, 1 \circ (BMH): the same data. 21.7.1965 (LMB), Wau 1150 m, 13. X.1965, 1 \circ (BMH): 12.IX, 1 \circ (JS), Wau big Ck., 300 m, XI.1965 P. Shanahan, 1 \circ (BMH).

Etymology: Named in reference to the type locality.

Diagnosis: Related to *M. brandti* n.sp., but differs in body coloration and in the shape of aedeagus.

Melaneros montanus n.sp.

Figs 91, 92, 144, 198.

♂. Body dark brown, elytra and margins of pronotum yellow. Head with prominent eyes, eye diameter 1.3 times longer than distance between eyes. Antennae weakly serrate (Fig. 198), provided with erect pubescence length of which is as long as half of segment width. Pronotum nearly semicircular (Fig. 144), predominantly yellow, with dark brown spot in discal area. Scutellum dark brown, slightly emarginate apically. Elytra 3.9 times longer than width at humeri. Male genitalia sinuate provided with a tooth in median portion, phallus thickened proximally (Figs 91, 92).

Body length: 7.6 mm; width at humeri:1.75 mm.

Holotype S' (BMH): Papua New Guinea: Mt. Wilhelm, 3000 m,. 4.VII.1955; Paratypes: Giluve, 2850 m, 29.V., 1 S' (JS); Epilam, 23.VI., 1 S' (JS).

Etymology: *Montanus* (Lat.) – mountainous, refers to beetle's range of distribution.

Diagnosis: From related *M. tenuissimus* it differs in the body coloration and in the shape of aedeagus.

9. Melaneros - pallescens group

Diagnosis: Antennal segment 3 long. Phallus stout, laterally compressed, provided with a flattened ventrobasal lobe. The orifice situated proximally (Figs 89, 201).

Melaneros pallescens n.sp.

Figs 89, 90, 143, 197.

♂ Body dark brown, pronotum (except median portion) and whole elytra yellow. Head with prominent eyes, distance between eyes 1.1 times longer than eye diameter. Antennae slender (Fig. 197), reaching over elytral midlength. Pronotum trapezoidal, lateral margins nearly straight, posterior angles sharp (Fig. 143), scutellum black. Elytra widened posteriorly, 3.7 times longer than wide.

Male genitalia stout and long (Fig. 89, 90), laterally compressed, provided with a dent in basal third, gradually narroved to distal curvature (lateral view).

Body length: 5.9 mm, width at humeri: 1.35 mm.

Holotype of (NHMB): Indonesia, Irian Jaya: Baliem Tal, 1700 m, III.1992, J. Kolibáč.

Etymology: Pallescens (Lat.) - pale, refers to beetle's coloration.

Diagnosis: Closely related to *M. nigropallescens* n.sp. from which it is easily distingushable by yellow body coloration and the shape of phallus.

Melaneros nigropallescens n.sp. Figs 201, 202, 210, 212.

 \circ . Body dark brown, only anterior third of elytra as well as anterior 2/3 of elytral margins yellow. Head with prominent eyes, eye diameter as long as distance between eyes. Antennae (Fig. 210) reaching to api-

cal third of elytra. Pronotum transverse (Fig. 212), anterior margin produced forwards, lateral margins straight, nearly parallel. Posterior angles acute, strongly prominent laterally. Elytra weakly widened posteriorly.

Male genitalia long and stout, phallus proximally widened, in this extension provided with an opening (Figs 201, 202) and a tooth heading ventrally. Phallus medially compressed and widened in apical fourth.

Body length: 5.3 mm, width at humeri: 1.25 mm.

Holotype ♂ (SMNS), Indonesia, Irian Jaya: Diuremna, 9.–11.IX.

1992, 1900–2100 m, A. Riedel (SMNS); allotype – the same data (SMNS).

Etymology: *Nigropallescens* (Lat.) – black-yellow, refers to beetle's body coloration.

Diagnosis: Related to *M. pallescens*, but differs in body coloration and in the shape of aedeagus.

10. Melaneros – supinus group

Diagnosis: Length of antennal segment 3 not stable, phallus simply staff-formed with distal portion dorsally hooked (Figs 51, 52, Bocák, L. & Bocáková, M., 1990, Figs 2, 3). Orifice weakly moved proximally (state 1), phallus weakly emarginate (in lateral view) at the proximal margin of the orifice.

Melaneros supinus n.sp.

Figs 51, 125, 176.

 \circ . Body dark brown, only pronotum, scutellum, base of elytra (as long as 2–3 reticulate cells), thorax, trochanters and bases of femora yellow. Head with large eyes, eye diameter 1.3 times longer than distance between eyes. Antennae slender (Fig. 176), reaching over elytral midlength, segments 10 and 11 rather lighter. Pronotum with rounded anterior margin, lateral margins slightly emarginate (Fig. 125). Elytra parallel-sided, 3.2 times longer than width at humeri.

Male genitalia simple (Fig. 51), phallus widest basally and dorsoproximally hooked at apex.

Body length: 4.3 mm; width at humeri: 1.15 mm.

Holotype ♂ (BMH): Indonesia, Irian Jaya: Nabire, 5–50 m, 25.VIII.– –2.IX.1962, J. Sedlacek (BMH).

Etymology: *Supinus* (Lat.) – posteriorly curved, refers to beetle's phallus.

Diagnosis: Related to *M. uncinatus* n.sp., but differs in body coloration, in the shape of pronotum and in having much larger eyes.

Melaneros uncinatus n.sp.

 \circ . Body dark brown to black, only humeral portions of elytra yellow, whole suture dark brown. Head with small eyes, distance between eyes 1.3 times longer than eye diameter in lateral view.

Antennae slender, reaching over elytral midlength. Pronotum with rounded anterior angles (Fig. 126), with weak folds forming shallow median areola. Scutellum black. Elytra 3.5 times longer than wide, moderately widened backwards.

Male genitalia widest medially (Fig. 52), dorsoproximally hooked at apex, phallus with a dorsomedial depression.

Body length: 4.6 mm; width at humeri: 1.1 mm.

Holotype of (BMH): Papua New Guinea, Wau, Morobe Distr., 1250–1300 m, 11.X.1962, J. Sedlacek. Paratypes: dtto, 1200–1300 m, 1.–9.IX.1965, J. & M. Sedlacek, 1 of (BMH); Morobe, Aseki, 1000–1300 m, 13.X.1992, A Riedel, 1 of (SMNS).

Diagnosis: Related to M. supinus n.sp. but differs in much slenderer phallus, much smaller eyes and in the body coloration.

Etymology: Uncinatus (Lat.) – hooklet-formed, refers to beetle's aedeagus.

11. Melaneros – turritus group

Diagnosis: Antennal segment 3 long. Phallus dorsoventraly flattened, with an extension distally or medially which is provided with a slot-formed ventral opening (Figs 40–46, Bocák, L. & Bocáková, M., 1990, fig. 10 – *M. uncus* which also seems to belong to this group). Orificial sclerite missing. Emargination of ventral surface of aedeagus present only in *M. semiapertus* n.sp..

Melaneros turritus n.sp.

Figs 40, 119, 170.

 σ . Body dark brown, scutellum rather lighter, only pronotum, trochanters and bases of femora yellow. Head with very large eyes, their diameter 1.5 times as long as distance between eyes.

Antennae serrate (Fig. 119), reaching apical fifth of elytra.

Pronotum produced forwards, lateral margins emarginate (Fig. 119), posterior angles acute. Elytra slightly widened backwards, 3.4 times longer than width at humeri.

Male genitalia like a stick, with oval extension in apical half of phallus, widest in apical 1/4, with a longitudinal opening distally (Fig. 40). Body length: 5.5 mm, width at humeri: 1.4 mm.

Holotype ♂ (BMH): Papua New Guinea:, Wau, Bulolo River, 850–900 m, 24.VIII.1965, J. & M. Sedlacek; Paratype, Bulolo, 730 m, 22.VIII.1956, E. J. Ford Jr., 1 ♂ (BMH).

Etymology: *Turritus* (Lat.) – high as a tower, refers to beetle's long aedeagus.

Diagnosis: Related to *M. usitatus* n.sp. from which it differs in having large eyes, strongly prominent posterior angles of pronotum and in the shape of aedeagus.

Melaneros rigidus n.sp.

Figs 41, 42, 120, 173.

♂. Body dark brown, only pronotum, scutellum, antennae, thorax, maxillary and labial palpi, trochanters and halves of femora yellow. Head with very large eyes, 1.4 times longer than distance between eyes. Antennae (Fig. 173) reaching over elytral midlength. Pronotum with anterior margin strongly produced forwards, lateral margins nearly straight (Fig. 120). Elytra slightly widened backwards, 3.3 times longer than width at humeri.

Male genitalia short and stout, gradually widened, widest in median portion (Figs 41, 42). Ventral longitudinal opening slot formed.

Body length: 5.45 mm, width at humeri: 1.3 mm.

Holotype \bigcirc (BMH): Papua New Guinea: Central Mts., Archbold lake, 760 m, 26.XI.–3.XII.1961, L. W. Quate.

Etymology: Rigidus (Lat.) - stiff, refers to beetle's phallus.

Diagnosis: Related to *M. turritus* n.sp. but differs in having phallus gradually widened, widest in median portion, lateral margins of pronotum nearly parallel.

Melaneros usitatus n.sp. Figs 43,

Figs 43, 44, 121, 172.

 \circlearrowleft . Body dark brown, only pronotum, partly scutellum, trochanters and halves of femora yellow, also antennal segments 11 and partly 10 yellow. Head with large eyes, their diameter 1.2 times longer than distance between eyes. Antennae slightly serrate (Fig. 172), reaching apical third of elytra. Pronotum produced forwards, lateral margins slightly emarginate (Fig. 121). Elytra parallel-sided, 3 times longer than width at humeri.

Male genitalia (Figs 43, 44) thickened at base of phallus, provided with an extension in apical third and an oval ventrodistal opening.

Body length: 5.3 mm, width at humeri: 1.35 mm.

Holotype ♂ (BMH): Indonesia, Irian Jaya: Ifar, Cyclops Mts., 400 m, 27.VI.1962, J. L. Gressitt; Paratype: Jayapura, Sentani, Cyclops Mts, 950–1450 m, 2.X.1992, A. Riedel, 1 ♂ (SMNS).

Etymology: Usitatus (Lat.) - usual, refers to beetles's aedeagus.

Diagnosis: Related to *M. turrritus* n.sp. and *M. rigidus* n.sp. but differs in having smaller eyes and in the shape of aedeagus with ventrally curved apex of phallus.

Melaneros semiapertus n.sp. Figs. 45, 46, 123, 171.

 \circ . Body dark brown, only lateral margins of pronotum and anterior half of elytra yellow. Head with large eyes, distance between eyes as long as eye diameter. Antennae weakly serrate (Fig. 171), reaching apical third of elytra. Pronotum with anterior margin produced forwards, lateral margins considerably emarginate (Fig. 123). Scutellum dark brown. Elytra parallel-sided, 3.9 times longer than width at humeri.

Aedeagus with strongly hooked distal third of phallus, widened in apical half (Figs 45, 46).

Body length: 5.45 mm, width at humeri: 1.2 mm.

Holotype ♂ (BMH): Papua New Guinea: Simbai, Bismarck Range, 1900 m, 29.V.1968, J.L. Gressitt.

Etymology: *semiapertus* (Lat.) – partly opened – refers to beetle's phallus.

Diagnosis: Related to *Melaneros usitatus* n.sp. but differs in the shape of pronotum and in aedeagus strongly hooked apically.

It also seems to be related to *M. uncus* BOC. ET BOC., 1990 from Sri Lanka but differs in having smaller eyes and in less hooked aedeagus.

12. Melaneros – cordatus group

Diagnosis: Antennal segment 3 long. Phallus more or less widened distally, with a ventral opening within this extension provided with an orificial sclerite.

Melaneros gravis n.sp.

Figs 30, 31, 114, 166.

 σ . Body dark brown to black, only humeral portions yellow in basal elytral third, whole suture dark brown. Head with small eyes, distance between eyes 1.1 times longer than eye diameter. Antennae weakly serrate (Fig. 166). Pronotum shining, 1.2 times as long as wide, lateral

margins slightly emarginate (Fig. 114), posterior angles projected obliquely backwards. Elytra parallel-sided, 3.5 times longer than width at humeri.

Male genitalia dorsoventrally thickened medially (Figs 30, 31), provided with nearly oval extension in apical half of phallus.

Body length: 6.1 mm, width at humeri: 1.5 mm.

Holotype ♂ (BMH): Papua New Guinea: Wau, 1150–1600 m, 9.II. 1968, J. Sedlacek.

Etymology: Gravis (Lat.) – forcible, refers to beetle's stout aedeagus.

Diagnosis: Resembles *M. cordatus* n.sp., but differs in having much smaller eyes, in the shape of pronotum and aedeagus.

Melaneros cordatus n.sp.

Figs 26, 27, 113, 165.

 \circ . Body dark brown to black, only trochanters, bases of femora and humeral portions of elytra yellow. Head with large eyes, their diameter 1.3 times longer than distance between eyes.

Antennae slightly serrate (Fig. 165). Pronotum with lateral margins nearly straight, anterior margin strongly produced forwards (Fig. 113). Folds in middle portion forming very shallow median areola. Elytra 3.9 times longer than wide, yellow humeral spots as long as 1/5 of elytra.

Male genitalia stout, with a strong rhomboidal extension distally (Figs 26, 27).

Body length: 7.2 mm, width at humeri: 1.6 mm.

Holotype ♂ (HMB): Papua New Guinea: Baiyer River, Sanctuary, 1.–5.IX.1969, J. Balogh.

Etymology: *Cordatus* (Lat.) – reasonable, refers to reasonably complicated aedeagus of the species.

Diagnosis: Related to *M. clissoldi* n.sp. but differs in the shape of extension of the phallus.

Melaneros clissoldi n.sp.

Figs 28, 29.

 \bigcirc . Body dark brown, basal half of elytra, trochanters and bases of femora yellow. Head and prothorax of the holotype missing.

Elytra parallel-sided, 3.8 times longer than wide at humeri.

Male genitalia stout, strongly thickened in median portion, provided with oval extension distally (Figs 28, 29).

Length of elytra: 5 mm, width at humeri: 1.3 mm.

Holotype \bigcirc (BMH): Papua New Guinea: Wau, Nakate Ridge, 1800 m, 22.XII.1963, H. Clissold.

Etymology: Named in honour of the collector.

Diagnosis: Related to M. cordatus n.sp. but differs in aedeagus medially thickened, provided with oval apical extension.

Melaneros spinosus n.sp.

Figs 47, 48, 127, 175.

 \bigcirc . Body dark brown, only pronotum, prothorax, scutellum, trochanters and bases of femora yellow. Head with large eyes, their diameter 1.1 times longer than distance between eyes.

Antennae weakly serrate (Fig. 175), reaching apical 1/5 of elytra. Pronotum with anterior margin semicircularly produced forwards, lateral margins nearly straight (Fig. 127). Elytra slightly widened backwards, 3.6 times longer than width at humeri.

Male genitalia stout, provided with an extension and oval opening in apical third. Orificial sclerite with a sharp spine heading proximally.

Body length: 6.05 mm; width at humeri: 1.6 mm.

Holotype \bigcirc (BMH): Papua New Guinea: Bulolo River, 1180 m, 17.IX.1969, J. & M. Sedlacek; Paratypes: Wau, Bulolo R., 900–1100 m, 25.IX.1965, J. Sedlacek, 1 \bigcirc (BMH): Garaina, 800 m, 15.I.1968, J. & M. Sedlacek, 1 \bigcirc (JS).

Etymology: Spinosus (Lat.) - thorny, refers to beetle's aedeagus.

Diagnosis: It differs from all other *Melaneros species* in the shape of aedeagus provided with a strongly sclerotized distal lobe with a reversed thorn.

Melaneros dimidiatus n.sp.

Figs 49, 50, 124, 174.

 σ . Body dark brown to black, only pronotum, trochanters and bases of femora yellow. Head with large eyes, eye diameter 1.35 times longer than distance between eyes. Antennae strongly serrate (Fig. 174), reaching apical third of elytra. Pronotum with arcuate anterior margin, lateral margins straight, obliquely divergent backwards (Fig. 124). Scutellum black. Elytra widened backwards, 3.05 times longer than width at humeri.

Male genitalia like a curved stick provided with ventral opening in apical half and a weak tooth distally (Figs 49, 50).

Body length: 7.4 mm, width at humeri: 2.0 mm.

Holotype \bigcirc (BMH): Papua New Guinea: Wau, Morobe Distr., Mt. Missim, 880–1050 m, 8.–9.II.1963, J. Sedlacek; Paratype: Wau, 12.IX. 1150 m, 1 \bigcirc (JS).

Etymology: *Dimidiatus* (Lat.) – semicircular, refers to beetle's ae-deagus.

Diagnosis: Related to *M. inflexus* n.sp. but differs in having less serrate antennae and in the shape of aedeagus which is not widened distally, its orificial sclerite weakly developed.

Melaneros perticatus n.sp. Figs 36, 37, 117, 168.

 σ . Body dark brown to black. Head with small eyes, distance between eyes 1.15 times longer than eye diameter. Antennae serrate, reaching apical third of elytra. Pronotum with anterior margin rounded, lateral margins divergent backwards and emarginate (Fig. 117). Elytra nearly parallel-sided, 3.3 times longer than width at humeri.

Male genitalia slender, weakly laterally curved, provided with short longitudinal opening distally (Figs 36, 37).

Body length: 6.0 mm, width at humeri: 1.5 mm.

Holotype ♂ (BMH): Indonesia, Irian Jaya: Wisselmeren, Moanemani, Kamo Valley, 1500 m, 15.VIII.1962, J. Sedlacek.

Etymology: *Perticatus* (Lat.) – provided with a stick, refers to beetle's aedeagus.

Diagnosis: It differs from *M. imbricatus* n.sp. in pronotum provided with strongly prominent posterior angles, much smaller eyes and in stout slender aedeagus without dorsal projection distally.

Melaneros inflexus n.sp.

Figs 38, 39, 118, 169.

 \circ . Body black, only anterior third of elytra yellow. Head with large eyes, their diameter 1.15 times longer than distance between eyes. Antennae (Fig. 169) strongly serrate, reaching apical fourth of elytra. Pronotum trapezoidal (Fig. 118), lateral margins convergent anteriorly, straight. Elytra slightly widened backwards, 3.5 times longer than width at humeri.

Male genitalia stout, widened proximally and distally, provided with a ventral longitudinal opening (Figs 38, 39).

Body length: 6.7 mm, width at humeri: 1.7 mm.

Holotype S' (BMH): Papua New Guinea: Wau, Morobe Distr., 1200 m, 5.–6.XII.1961, J. & J. H. Sedlacek. Paratypes: the same data, J. & M. Sedlacek, 2 S' (BMH, LMB); Wau: Mc Adam park, 18.–21.IV. 1965, J. Balogh & J. J. Szent – Ivány, 1 S' (HMB). Etymology: Inflexus (Lat.) - hooked, refers to beetle's aedeagus.

Diagnosis: Related to *M. dilatatus* n.sp., but differs in having large eyes and in the shape of aedeagus.

Melaneros imbricatus n.sp.

Figs 34, 35, 116, 167.

 σ . Whole body dark brown to black. Head with prominent eyes, their diameter 1.2 times longer than distance between eyes.

Antennae serrate (Fig. 167), reaching apical third. Pronotum with anterior margin strongly produced forwards, lateral margins emarginate (Fig. 116). Elytra weakly widened posteriorly, 3.2 times longer than width at humeri.

Male genitalia with an opening in apical third of phallus, provided with a dorsal protrusion in apical 1/4, well visible in lateral view (Figs 34, 35). Body length: 4.5 mm, width at humeri: 1.15 mm.

Heleture 2 (DMH): Dismoral Arab Manua I. I aran

Holotype \circ (BMH): Bismarck Arch., Manus I., Lorengan, 1–75 m, 27.VI.1959, J.L. Gressitt.

Etymology: *Imbricatus* (Lat.) – like a roof, refers to beetle's aedeagus. Diagnosis: Related to *M. perticatus* n.sp., but differs in having conspicuous anterior angles of pronotum and in aedeagus with dorsal projection in apical 1/4.

Melaneros dilatatus n.sp.

Figs 32, 33, 115.

 \circ . Body dark brown, only basal 2/5 of elytra yellow. Head with eyes weakly prominent, distance between eyes as long as eye diameter. Anterior angles of pronotum rounded (Fig. 115), scutellum black, slightly emarginate apically. Elytra slightly widened posteriorly, 3.3 times longer than width at humeri.

Male genitalia strongly widened in median portion, then tapering towards apex, sinuate dorsoventrally, ventral opening reaching from median portion to apex (Figs 32, 33).

Body length: 5.45 mm, width at humeri: 1.4 mm.

Holotype S^{*} (BMH): Papua New Guinea: Minj, W. Highlands, 8.–13.IX.1959, T.C. Maa.

Etymology: *Dilatatus* (Lat.) – widened, refers to beetle's median extension of phallus.

Diagnosis: Related to *M. inflexus* n.sp. but differs in having smaller eyes, shorter ventral opening of phallus and in its considerable median extension.

Remark: Holotype with both antennae missing.

13. Species of uncertain position

Melaneros infusus n.sp.

Figs 13, 14, 102, 157.

 σ . Body dark brown, only pronotum, trochanters and bases of femora yellow. Head with relatively large eyes (Fig. 102), eye diameter 1.3 times longer than distance between eyes. Antennae (Fig. 157) reaching over elytral half. Pronotum with slight longitudinal groove in the middle, anterior angles conspicuous.

Elytra 3.4 times longer than width at humeri, slightly widened posteriorly. Scutellum of the same colour as elytra.

Male genitalia widest in apical third, provided with a funnel shaped opening distally (Figs 13, 14).

Body length: 5.75 mm, width at humeri: 1.45 mm.

Holotype \bigcirc (BMH): Papua New Guinea: Wau, Bulolo R., 850–900 m, 24.VIII.1965, J. & S. Sedlacek; Paratype \bigcirc (JS), the same data.

Etymology: Infusus (Lat.) – Funnel-shaped, widened – refers to beetle's phallus.

Diagnosis: Perhaps related to *M. sedlaceki* n.sp., but differs in the body coloration, in missing dorsoapical ridges of phallus which is provided with a funnel shaped distal opening.

Melaneros excelsus n.sp.

Figs 64, 65, 134, 184.

 σ . Body dark brown, only pronotal margins and anterior third of elytra yellow. Head with relatively large eyes, distance between eyes as long as eye diameter. Antennae (Fig. 184) reaching elytral midlength. Pronotum trapezoidal, anterior margin produced forwards, lateral margins strongly convergent anteriorly (Fig. 134). Elytra parallel-sided, 3.5 times longer than width at humeri.

Male genitalia medially compressed, provided with two sharp projections ventrally and with a dorsal lobe in median portion (Figs 64, 65).

Body length: 6.0, width at humeri: 1.5 mm.

Holotype of (BMH): Papua New Guinea: Yaibos, 2030–2180 m, 11.VI.1963, J. Sedlacek; Paratype, o, the same data, 10.VI.1963 (BMH).

Etymology: Excelsus (Lat.) - noble, refers to beetle's aedeagus.

Diagnosis: Resembles *M. semiapertus* n.sp. in body coloration but differs from all other known species in the shape of aedeagus.

Melaneros languidulus n.sp.

 \bigcirc . Body dark brown, only pronotum, thorax, trochanters, bases of femora and sometimes scutellum yellow. Head with large eyes, eye diameter 1.6 times longer than distance between eyes.

Antennae (Fig. 178) reaching apical third of elytra. Pronotum with anterior margin produced forwards, lateral margins emarginate (Fig. 122). Elytra 3.5 times longer than width at humeri, slightly widened backwards.

Male genitalia staff-formed (Fig. 53), with a dorsal dent apically, apex membraneous (visible only after having been stained).

Body length: 6.45 mm, width at humeri: 1.55 mm.

Holotype \circ (BMH): Papua New Guinea: Wewak, Sepik Distr., 30 m, 26.VI.1961, J.L. & M. Gressitt; Paratypes: New Guinea, Fimschnatou, 4.II.1963, 1 \circ (JS); Stephansort, Astrolabe Bai, Biró, 1900 m, 1 \circ (HMB).

Etymology: *Languidulus* (Lat.) – tired, refers to membraneous apex of phallus which looks like tired.

Diagnosis: It seems to be related to *M. languidus* (Wath.), but differs in having slenderer antennae, in the shape of aedeagus and in the body coloration.

Remark: Scutellum usually yellow, sometimes brown.

Melaneros humboldti (Pic)

Plateros Humbolti PIC, 1923: 35. Plateros Humboldti: KLEINE, 1933: 91.

Remark: Unfortunately holotype of this species has been lost in the Museum of Natural History in Paris. Pic's original description – "Pro-thorax without areolae, simply folded posteriorly. Dark, ribs of prothorax rusty, thorax and partly legs yellow, length 5 mm." – reminds of *M. quateorum* n.sp., but the description is too brief to be sufficient to identify the species.

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